Exploring the power of the augmented soft and hard ecotourism spectrum to segment walkers on the Overland Track, Tasmania

by

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A week after spending eight days in the middle of the Overland Track for data collection, I went back to walk the track for my pleasure. When I was looking at Mt Geryon in the Pine Valley and thinking my research could contribute to protecting this place, it was the moment of my life. This journey certainly challenged me, and it has not been possible without support of many people. I wish to acknowledge people who lead me to today.

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Abstract

The focus of the study is the Ecotourist Spectrum devised by Weaver and Lawton in 2001. The Spectrum was the first to suggest that ecotourists display a range of hard to soft characteristics and has become an accepted part of the literature on ecotourism. Yet, a detailed examination of the literature found that this behaviour-based Spectrum produced only a limited distinction between ecotourists, while other studies suggested the potential to incorporate values into the Spectrum to provide a more detailed segmentation of ecotourists (Blamey & Braithwaite, 1997, Zografos & Allcroft, 2007). Weaver and Lawton's original Spectrum was augmented by adding values and the modified range of variables were tested by applying the new spectrum to the ecotourism experience of the Overland Track, a multi-day walk in Tasmania.

This study employed Q methodology, which according to Robbins and Kruger (2000) is the scientific study of subjectivity. The data were collected in two phases; phase one comprised of 60 interviews with respondents that had recently completed the Overland Track walk. Their responses shaped the wording of the Q method statements that phase two interviewees were asked to sort. The statements were based on the nine behavioural criteria derived from Weaver and Lawton's Spectrum plus three additional emergent criteria on values generated from phase one data. In phase two, 54 individual respondents that were at the end of their walk (or were on the Track) agreed to sort 36 statements on a distribution scale and be interviewed to explain their choices. The transcribed interviews were correlated and factor analysed using PQ Method.

The study identified five distinctive groups of ecotourists with each of the groups containing walkers who displayed a combination of soft and hard ecotourist characteristics. The absence of purely soft or hard ecotourists in this study suggests that Weaver and Lawton's Ecotourist Spectrum lacks the sophistication to effectively segment ecotourists on the Overland Track. In addition, the incorporation of the statements on values proved effective in detecting the five groups of ecotourists. This study proposes a spectrum of ecotourists who participate in multi-day walks that offers a finer grained understanding of ecotourist market segments. The study also recommends that future research is conducted to test the developed spectrum in additional ecotourism contexts.

1. Chapter 1 Introduction

1.1 Brief Background

The term ecotourism first appeared in academic English literature in 1985 (Weaver, 2001b), and it has been a popular topic of tourism research (Lu & Nepal, 2009). It emerged as a solution for destructive impacts of conventional mass tourism (Reichel, Uriely & Shani, 2008). Ecotourism is widely recognised as "environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy , study and appreciate nature and any accompanying cultural features-both past and present, that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations" (Ceballos-Lascurain 1996, p. 20). It is also recognised that ecotourism is often characterised as nature based, contains educational and learning elements and is developed on sustainable practices (Weaver, 2001b).

According to Buckley (2009) while the definition of ecotourism had been the subject of academic debate for decades, a single agreed definition had not emerged by 2009. The central problem of ecotourism as outlined by Weaver in 2005 was the ambiguity of how to implement sustainable practice when no clear consensus existed over the topics including what should be sustained, what actions are sustainable and how to assess sustainability (Weaver, 2005). The lack of an agreed definition also led to operational difficulties. The presence of tourism businesses who take advantage of green marketing without following the principles of ecotourism (Font, 2002) and a lack of regulatory control to manage such business practices, also created contested interpretations of ecotourism business (Newsome, Moore & Dowling, 2002).

In the prolonged search for an agreed definition of ecotourism, Palacio and McCool (1997) suggested attempting to understand the people who participate in ecotourism activities, as a way to advance knowledge in ecotourism research. In 1997, Palacio and McCool argued that the term ecotourist was poorly defined. Wight's research of 1996 and 2001 suggested that any participant in nature based activities was being identified as an ecotourist leading Perkins and Brown (2012) to conclude that in the 1990s the accepted approach to ecotourists was to view them as a homogenous group of nature based tourists. The lack of exploration of the topic of ecotourists and the focus on their activities also resulted in a lack of distinction between ecotourists and participants of nature based tourism (Wight, 2001).

As the 1990s progressed, the trend towards ecotourist segmentation studies was confirmed. It became clear by the end of the 1990s that theoretical and empirical studies demonstrated that the ecotourism market could be segmented and was not homogenous (Wight, 2001, Weaver & Lawton, 2002, Fennell, 2003). Although attention had altered to focus on segmentation, relatively few studies have been completed (Blamey & Braithwaite, 1997, Palacio & McCool, 1997, Weaver & Lawton, 2001, Bricker & Kerstetter, 2002, Zografos & Allcroft, 2007). In addition, a lack of consistency in terminology and methodology of these studies makes it difficult to generalise from their findings. Unfortunately the selection of a range of key measurements by the different studies resulted in different terminology being adopted to describe each segment of the ecotourism market. Consequently there was still a lack of generalised knowledge about ecotourists.

The shift of focus to ecotourism market segmentation generated attention on the concept of a soft to hard spectrum (Weaver & Lawton, 2001, Weaver & Lawton, 2007, Collins-Kreiner & Israeli, 2010). Originally developed by Weaver and Lawton in 2001, the spectrum (the Spectrum) of soft and hard ecotourists lists 10 behavioural based dimensions to distinguish ecotourists along the spectrum from soft to hard. For instance hard ecotourists expect deep interaction with nature and few services and facilities in the wilderness, whereas soft ecotourists look for superficial encounters with nature and extensive services and facilities (Weaver & Lawton, 2001). The Spectrum has been applied to specific tourism sites to identify the types of visitors ecotourism businesses attract and what is required to satisfy their needs (Collins-Kreiner & Israeli, 2010). By disclosing the heterogeneous market, ecotourism operators can more effectively offer services and facilities suited to their visitors (Brandon, 1996).

This study proposes the potential to improve the Spectrum by integrating psychological items such as values to the Spectrum. Firstly, the study understands that the notion of the soft and hard spectrum is a key strategy to integrate the differing ungeneralisable results of other empirical studies of ecotourism market segmentation. Although names of segments found in other studies all vary, each study found segments in the spectrum based on the key variables used as the basis to differentiate people. Secondly, this study found that while the Spectrum distinguishes ecotourists based on behavioural characteristics, this approach differs from other studies of ecotourism market segmentation, which have tended to focus on psychographic variables such as values. Values are core beliefs that influence behaviour, and

they are enduring, having better predictive ability in relation to expected behaviour (Blamey & Braithwaite, 1997). Studies by Blamey and Braithwaite (1997) and Zografos and Allcroft (2007) have shown value based segmentation of the ecotourism market can provide a deeper understanding of the segments. Yet value based segmentation studies only cannot provide useful and practical implications of characteristics of ecotourists for ecotourism businesses. Therefore there is a need to add values to the Spectrum and to test if the segmentation power is enhanced.

This study identifies multi-day walks (MDWs) in the wilderness as an ecotourism activity and there is a need to understand the segments of ecotourists participating in the activity. MDWs are scarcely studied in academic research (den Breejen, 2007, Crust, Keegan, Piggott & Swann, 2011, Saunders, Laing & Weiler, 2013), and little is known about the experience of multi-day walkers (Crust et al., 2011). Few available academic studies have been conducted in understanding the dynamics of the MDW experience (den Breejen, 2007) and the psychological journey experienced by the walkers. All these studies are based on the assumption that the experience of all multi-day walkers is similar. In contrast, this study intends to research the characteristics of different groups of people who are participating in the same activity.

1.2 Research problem and contribution

1.2.1 The research problem

The soft and hard Spectrum devised by Weaver and Lawton in 2001was the first to suggest that ecotourists display a range of hard to soft characteristics and has become an accepted part of the literature on ecotourism. Yet, a detailed examination of the literature found that this behaviour-based model produced only a limited distinction between ecotourists. Other studies suggested that the examination of values held by ecotourists would generate a more effective segmentation of this type of tourist than the behaviour-based Spectrum. Yet segmentation studies based only on values cannot provide useful and practical implications of the characteristics of ecotourists for ecotourism businesses (Blamey & Braithwaite, 1997, Zografos & Allcroft, 2007). It is therefore the intention of this research project to incorporate values into Weaver and Lawton's original Spectrum and test the ability of the augmented spectrum by applying the modified range of variables to the ecotourism experience of the Overland Track, a multi-day walk in Tasmania.

1.2.2 The research question

The research question is

To what extent does the inclusion of values in Weaver and Lawton's Ecotourist Spectrum affect its ability to segment ecotourists in the context of a multi-day walk?

1.2.3 Contribution of research

The study aimed to improve theoretical understandings of soft and hard ecotourists by integrating values into the research design. The Soft and Hard Ecotourism Spectrum developed initially by Weaver and Lawton in 2001 and modified by Fennel and Weaver in 2005 had become an accepted part of the literature on ecotourism. On closer inspection of the literature however it was found that the number of studies which have tested this model empirically in the field was limited. Much of the research in this area suggested that trying to gain an understanding of the values of ecotourists could generate more knowledge of likely behaviour. By integrating value dimensions into the Spectrum, and using the augmented Spectrum to segment Overland Track walkers, the study explored the ability of the augmented Spectrum to distinguish ecotourists. Given studies of ecotourism are primarily investigated from the supply side, this demand side study adds more knowledge to the literature about ecotourists (Sharpley, 2006, Perkins & Brown, 2012).

MDWs are scarcely studied in academic research (den Breejen, 2007, Crust et al., 2011, Saunders et al., 2013), and little is known about the experience of multi-day walkers (Crust et al., 2011). This study aimed to test whether people participating in MDWs were homogenous or could be segmented into groups. By adopting the augmented Spectrum, this study hoped to reveal similarities and differences of multi-day walkers in their values, travel characteristics, and in their attitudes to the levels of the provision of track facilities. In doing so, the study has contributed to revealing the extent to which the Overland Track and other multi day walks can be developed in the eyes of their users. The selection of the Overland Track in this study provides a case of how a popular MDW in the wilderness should be developed to improve the reputation of the walk, the quality of the experience of the walkers, but also to protect the environment from the impacts of walkers.

1.3 Research design and method

As discussed in greater detail in Chapter 3, the methodological approach taken in this study uses a mixed method based on Q method. Q method is understood as a scientific study of subjectivity (McKeown & Thomas, 1988, Robbins & Krueger, 2000). It understands that subjectivity has a measurable internal structure, which is observable as an expression of one's behaviour (Robbins & Krueger, 2000). Q method looks at subjectivity to identify distinctive dimensions and characteristics of individuals who share common perspectives (Fairweather & Swaffield, 2001, Lai, Kupst, Cella, Brown, Peterman & Goldman, 2007). For this, Q method is suited for contested topics such as sustainability (Barry & Proops, 1999, Eden, Donaldson & Walker, 2005, Boonitt & Pongpanarat, 2011). It is a technique for revealing a limited number of patterns shared across individuals and the diversity of accounts in a structured and interpretable manner (Barry & Proops, 1999).

Q method combines Q sorting with interviews. Q sorting is the quantitative operation in which participants rank order a set of statements (Brown, 1993), and the rankings of statements are subjected to factor analysis, and the resulting factors indicate segments of subjectivity. Therefore it can be modelled by a respondent who systematically rank orders a purposefully sampled set of statements (Robbins & Krueger, 2000). Then Q method is also often followed by interviews to verify the accuracy of the interpretation of the factors. Stergiou and Airey (2010) state that the Q soring process demonstrates the skeleton of subjectivity which needs to be interpreted through the voices of participants. Interviews can improve validity of Q method as they can reveal the relationship and inconsistencies in the Q sort (Stergiou & Airey, 2010). In short, Q method which involves interviews can qualitatively interpret participant's perspectives while quantitatively analysing them (Gallagher & Porock, 2010). Fairweather and Rinne (2012) also say that quantitative aspects are largely seen in establishing the factors, while qualitative aspects are seen in understanding the factors.

In this study, Q method was conducted in the following four stages;

1. Generate the concourse (Phase One interviews)
2. Select a set of Q statements (Data analysis of Phase One interviews)
3. Perform Q sort (Phase Two interviews)
4. Process Q sort (Data analysis of Phase Two interviews)

Q method starts with a preliminary study of identifying as wide a variety of opinions as possible about the topic under investigation (Barry & Proops, 1999, Robbins & Krueger, 2000, Eden et al., 2005, Stergiou & Airey, 2010). The concourse is a technical term used in Q method which describes a contextual structure of all the possible perspectives that respondents might make about the research topic (Stephenson, 1993). In this study, the concourse was defined as "*motivations, values and travel characteristics of the Overland Track walkers*", and preliminary interviews (Phase One interviews) were undertaken to develop the concourse. Secondly, Phase One interviews were manually transcribed and analysed to select a set of statements. Statements that represent dimensions of soft, medium and hard levels of behaviour outlined in Weaver and Lawton's (2001) original spectrum. In addition, the Phase One interviews were interrogated to extract value related dimensions. These values drawn from the words of the interviewees were incorporated as statements into the list of ecotourism dimensions drawn from the Spectrum. In the third stage, participants were asked to sort the set of statements developed in the second stage and to elaborate on their choices and preferences for the statements (Phase Two interviews). Finally, data analysis of the Phase Two interviews was conducted with use of software to identify groups of people with similar patterns of sorting into factors followed by interpretation of their interview transcripts to understand the reasons for their particular ordering.

1.4 Thesis structure

The overall structure of the study takes the form of six chapters. Chapter 2 provides a literature review of tourism and environment. It draws attention to the historical development of ecotourism in the literature from when it first appeared in 1985, and it evaluates existing literature on ecotourists, to identify linkages between behavioural characteristics and motivational dimensions. Research opportunities are identified which lead to the research question.

Chapter 3 outlines the research philosophy guiding data collection and analysis within this research. The research design and methods of data collection and data analysis are explained and justified.

Chapter 4 presents the findings of the preliminary study. The findings of Phase One interviews are analysed to form a set of statements that Phase Two interviewees were asked to sort. A selection of 36 statements is presented.

Chapter 5 identifies the findings of the Phase Two interviews, and defines in detail the characteristics of Overland Track walkers segmented by the modified spectrum.

Chapter 6 analyses the characteristics of Overland Track walkers in comparison to the soft and hard ecotourist Spectrum, discussing key themes in relation to the extant literature on ecotourism market segmentation studies as well as multi-day walks. This chapter also outlines implications for the soft and hard ecotourist Spectrum and practice as well as limitations of this research and recommendations for future research.

Throughout this study, the term 'the Spectrum' will refer to the soft and hard ecotourism spectrum originally developed by Weaver and Lawton (2001).

1.5 Chapter conclusion

This chapter has detailed the focus and structure for the research reported in this dissertation. It has briefly introduced the complex phenomena of ecotourism, outlining the movement from an unproductive search for an agreed definition of ecotourism to an understanding of ecotourists, and explored the potential to integrate the spectrum of soft and hard ecotourists with other empirical studies of ecotourism market segmentation. This was followed by an overview of the research opportunity, including the research question and contribution and the research design and the structure of the thesis were outlined. The next chapter provides an exploration of the literature on ecotourism. It provides a comprehensive discussion on the emergence of ecotourism, the definitions and principles of ecotourism, the contested interpretation of ecotourism in practice, the spectrum of ecotourists in ecotourism markets and finally proposes multi-day walks as an example of ecotourism activity that create environmental, social and cultural sustainability implications.

2. Chapter 2 Literature Review

2.1 Chapter objective

The purpose of this chapter is to review the literature on ecotourism. It reviews how ecotourism has emerged, and how little is known about the spectrum of ecotourists. Understanding the emergence of ecotourism requires an appreciation of the factors of traditional mass tourism that led to negative impacts on the environment. This chapter begins by identifying factors of tourism that cause negative environmental impacts, and suggests that they are attributed to mass tourism which led to calls for the development of alternative forms of tourism. Section 2.3 will introduce definitions and fundamental principles of ecotourism, followed by contested interpretations of ecotourism in practice. Section 2.4 will shift the focus to the spectrum of ecotourists in ecotourism markets. The review will argue that a lack of generalisable and consistent characteristics of the spectrum of ecotourists existed for some time as empirical studies that identify characteristics of people in the ecotourism market will be compared. This section also identifies the Spectrum of soft and hard ecotourists developed by Weaver and Lawton (2001) as a focus of this study which seems to be key to integrate the differing ungeneralisable results of other empirical studies of ecotourism market segmentation, but one that also requires augmentation. Section 2.5 looks at multi-day walks as an example of ecotourism activity that has environmental, social and cultural sustainability. The chapter will conclude by presenting the research gap and research question in Section 2.6 followed by proposed implications of the study in Section 2.7.

2.2 Movement towards ecotourism

2.2.1 Tourism and Environment

The word, environment can be classified into two types; the natural environment and the built environment. The former comprises of both environmental components such as wildlife and ecosystems, such as the geological landscape of the Grand Canyon, US and coral reefs in the Great Barrier Reef, Australia. The latter refers to the man-made environment where natural resources are transformed into facilities and infrastructure including resorts, hotels and second home developments (Mathieson & Wall, 1982). Butler (2000) suggests a certain form of tourism has more links with the environment, especially tourism operated in the natural environment. The focus of this study is on the natural environment.

The environment is the foundation of the tourism industry, and it is a major source of attracting tourists (Mathieson & Wall, 1982). It is perceived that tourism needs to sustain the

environment in which it operates for its own long term economic sustainability. However, the impacts of tourism are often reported as being negative (Newsome et al., 2002, Buckley, 2009).

What would be the factors of tourism that lead to negative environmental impacts? One of the early overviews of the environmental impacts of tourism was given by Cohen (1978), followed by work from Mathieson and Wall (1982). Their work provided a fundamental understanding on the subject of environmental impacts of tourism, and subsequent studies have only added little conceptual importance to the subject matter (Butler, 2000). Cohen (1978) identified four factors; 1) intensity of tourist use, 2) the resiliency of the ecosystem, 3) time perspective of the developer, and 4) transformational character of recreational development as key contributing factors of tourism damaging the environment. Firstly, according to Cohen (1978), the intensity of tourist use is determined by the number of tourists, their length of stay, their activities and the facilities at their disposal. When the number of tourists increases, the need for development also increases. Local and unspecialized facilities to cater to a small number of tourists are replaced and transformed into a region providing mass tourists with specialised facility as well as transport and the supply system (Cohen, 1978). Nyaupane and Thapa (2006) also reported that the speed of deforestation increases with a rise in the number of tourists in Nepalese mountain parks. This is because, timber and firewood has been the major source of energy to meet needs of tourists in cooking, heating and lodging due to remoteness and lack of alternatives.

Secondly, the natural environment in which tourism operates may be fragile, and highly delicate environments can be easily damaged (Cohen, 1978). This particularly applies to tourism operated in protected areas, and to the vulnerable features of unique natural environments such as small islands where tourism is a serious threat to endemic fauna and flora (Cohen, 1978). Protected areas can be national parks, wilderness areas, community conserved areas, nature reserves, and they refer to **"**clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values" (Dudley, 2008, p. 8). Failure to manage irresponsible tourists also leads to serious environmental consequences. In the previous example of coral reef damage in the Great Barrier Reef, inappropriate tourist behaviour, such as swimming too close to fragile branching corals among a minority of divers is also a contributing factor to destruction of coral reefs (WWF-Australia, 2004). In addition, Nyaupane & Thapa (2006) report that litter is

one of the most controversial issues in Mount Everest. Uncontrolled tourism resulted from limited control of the behaviour of tourists, along with deforestation, largely affects the landscape of the national parks where Mount Everest is located (Page & Connell, 2009). This clearly points out the importance of educating visitors to behave in an accepted way in a given environment as part of tourism management.

The third factor is the time perspective of tourist developer. Cohen (1978) indicates that the assumption that developers will act to sustain the environment, which is the source of their profit for the long term, is not always guaranteed. Developers with short run profits in mind invest little and sell out quickly at high profits, and they care little about the eventual effect of their speculation. They are aware of potential environmental impacts of their business however, it is perceived that their profit making operation is too small to change the overall environment (Cohen, 1978). Mathieson and Wall (1982) also point out tourism businesses leaving the responsibility to other stakeholders using the resources. Tourism is not the only user of the environment, and it is hard to separate the impacts of tourism from other processes of change (Butler, 2000). Therefore, it seems that tourism developers can use this as a good excuse for leaving to others their responsibility for taking care of the environment.

Finally, Cohen (1978) believes that the transformational character of tourism can even change natural environments through major adaptions and changes to prevent damage from massive tourist use. If managers in protected areas choose to harden the site to cater to mass tourists who demand more sophisticated and hardening facilities, the site might undergo transformation from a natural to an artificial environment (Pickering & Hill, 2007).

These negative environmental problems were largely seen as being attributed to traditional mass tourism. Intensive development, irresponsible management which does not consider resistance and resilience of ecosystems, short term business plans as discussed by Cohen (1978) can easily be explained by the pure focus of mass tourism on economic profits. However, the uncovering of negative environmental impacts became a driving force of a movement towards the development of alternative forms of tourism.

2.2.2 Movement towards alternative tourism

Since the early 1960's, tourism development has been dominated by traditional mass tourism which primarily focused on economic benefits for tourism businesses and affordable prices for tourists by standardising products (Buhalis, 2001, Newsome et al., 2002). Tourism products are developed to meet standardised interests of tourists at lowest prices to maximise

profits, which can be better described as commodities rather than services (Buhalis, 2001). It became a popular form of tourism as physical travel itself, visiting different parts of the world and escape from daily life attracted tourists (Buhalis, 2001).

The negative impacts of tourism were not limited to the environment but on the experience of tourists as well as destinations. In protected areas, environmental issues such as pollution, wildlife disturbance, and damage caused by vehicle use as well as social issues including overcrowding, overdevelopment, unregulated recreation, became apparent (Buhalis, 2001). Without much interaction with local people and the environment, tourists do not learn much from the trip, but just enjoy being at leisure (Buhalis, 2001). Markwell and Weiler (1998) argue that tourists are preoccupied with artificially constructed images, and they are happy with inauthentic and superficial experiences. Consequently the social and cultural appeal of destinations were also threatened due to the fact that community and culture lose parts of their character, appeal, and authenticity when they develop facilities and services to accommodate the mass market (Buhalis, 2001).

However, tourism products gradually became driven more by the demand rather than the supply side. Some tourists detected unpleasant consequences of human development, and they became increasingly willing to minimise such negative impacts. In the 1960's, increasing pressure on natural areas became apparent due to tourism development. With the growing environmental awareness and concerns of the general public in the 1970's (Page, 2007), some tourists gradually attempted to travel away from perceived mass tourism destinations, as unsustainable businesses were becoming regarded as ethically unacceptable (Buhalis, 2001). Some tourists started to demand responsible forms of tourism which is often characterised as small scale, locally owned and aimed to minimise negative impacts on the environment, society and culture (Newsome et al., 2002).

In the late 1980's, tourism researchers witnessed the trend that travel began to be considered as not just leisure time and escape from daily life, but also an opportunity for personal development (Buhalis, 2001). Tourism activity provides learning opportunities when tourists can enhance skills, interests and hobbies. This movement is characterised as independence and individuality, as multi interests of each tourist need to be satisfied by specialised tourism products (Buhalis, 2001). This type of tourism is considered as community based, responsible for the socio-cultural and the natural environment, while it provides tourists with new choices and rewarding experiences (Jafari, 1990). Therefore, it was an alternative to mass tourism (Jafari, 1990). This new movement is evidenced by a Forum held by the World Tourism

Organization (World Tourism Organization, 2011), the Global Tourism Forum Andorra 2011. Based on the fact that the tourism sector is labour intensive, creating economic security and contributing to society, it claims that it is important to establish new pathways that all tourism development becomes responsible and sustainable. They point out that collaborated action which concerned the triple bottom line that is sustainability in the economy, environment, and society is crucial (World Tourism Organization, 2011). The necessity is now growing as increasing pressure of tourism is both a threat and an opportunity for development.

2.3 Study of Ecotourism

2.3.1 Definition of ecotourism

The term, ecotourism first appeared in academic English literature in 1985, yet Mexican ecologist, Hector Ceballos-Lascurain used 'ecoturismo' (ecotourism in Spanish) 10 years before that (Weaver, 2001a). The earliest use of 'ecotour' goes back to the 1960's by Parks Canada (Fennell, 2001). Ecotourism has emerged as a solution for the destructive impacts of conventional mass tourism (Reichel et al., 2008). Therefore, ecotourism attempts to achieve a symbiotic relationship with the environment that traditional mass tourism often fails to do, by constructing principles. As an alternative form of tourism to mass tourism, ecotourism is often characterised as small scale, locally owned aiming to minimise negative impacts on the environment, society, and culture (Weaver, 2001a, Newsome et al., 2002).

One of the most frequently cited definitions of ecotourism is by Ceballos Lascurain (1996, p. 20)

> Ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy, study and appreciate nature and any accompanying cultural features - both past and present, that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations.

Another widely used definition of ecotourism is, from Ecotourism Australia (2012) on its web, "ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation".

Yet, ecotourism has a number of issues starting with inconsistent definitions of what is ecotourism. After 20 years of discussion, academics had not agreed on a single definition of ecotourism (Weaver, 2005, Buckley, 2009, Collins-Kreiner & Israeli, 2010). (Weaver, 2001a)

analysed a range of definitions and introduced a 'spectrum' of key differences of defining the term. While education, learning or appreciation about the natural environment are essential elements in ecotourism, there is a spectrum of the aim of such learning experiences. Some only include learning experiences as a component of ecotourism, whereas others aim to improve interest levels of visitors by 'enlightening' or 'foster understanding' such as Ecotourism Australia (2012). Similarly, Orams (1995) argues that while environmental protection is one component of ecotourism, some definitions aim to enhance or improve the current conditions of the environment, when others take a more passive perspective and seek not to damage the status quo. Therefore, the difference is in the spectrum of human responsibility (Orams, 1995). Weaver (2001a) concludes that the transformational element is not an essential aspect of education, however it is desirable if it is to result in sustainable outcomes. One of the challenges of ecotourism is to encourage ecotourists to move from a minimal passive to a more active position in order to contribute to the sustainability of the attractions (Orams, 1995). It seems that the issue is whether the definition needs to be realistic or idealistic, although this may be only one of many complex issues involved in defining ecotourism. Despite the prolonged debate on the definition of ecotourism, there is an emerging consensus of qualifying elements of ecotourism (Weaver, 2005). The next section outlines the generally agreed three principles of ecotourism.

2.3.2 Principles of ecotourism

Fennell (2001) analysed 85 definitions of ecotourism in the tourism literature and found the five most frequently cited dimensions were (1) natural areas, (2) culture, (3) education (4) conservation and (5) benefits to locals. Further, Blamey (2001) and Weaver (2001a) agreed to summarise the five criteria into three (1) nature based elements, (2) education and learning and (3) requirement for sustainability by involving ecological, economic, and socio-cultural aspects in sustainability. These three key principles are widely used as fundamental principles of ecotourism (Newsome et al., 2002), and will be analysed in detail.

Principle 1: Nature based

Ecotourism is described as operating in relatively unmodified (Weaver, 2001b), undisturbed (Buckley, 2009) or unspoilt natural environments (Perkins & Brown, 2012). The attractions of ecotourism should be fundamentally based on nature and allow people to interact with flora and fauna (Nowaczek & Smale, 2010). Nature based attractions focus on either

ecosystem/habitat or elements of nature such as specific mega fauna, such as dolphins and whales (Newsome et al., 2002).

Principle 2: Interpretation

A widely used definition of interpretation today (Ham, 1992, Uzzell & Ballantyne, 1998, White, Virden & Cahill, 2005, Walker, 2007) is

> an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information (Tilden 1977, p. 8).

Tilden (1977) suggests it is distinguished from education as participation is voluntary and participants experience something of beauty and wonder behind environmental and cultural heritage. Whereas education is concerned about formal facts, interpretation needs stimulative and relevant information in order for people to provoke their understanding (Tilden, 1977).

Interpretation is also defined as a type of communication. Whereas communication creates understanding and makes connections between communicators and receivers of messages (Moscardo, 1999), interpretation can generate connections between destinations, host communities, and tourists (Lee, 2009). When tourists understand and recognise the importance of the tourism destination, they gain a better appreciation towards their experience (Lee, 2009).

Thus interpretation functions as a bridge connecting tourists and tourist destinations and it encourages tourists to understand the value of the place and therefore promote appreciation and respect towards it (Lee, 2009). The interaction with nature not only gives an opportunity for tourists to learn and/or appreciate the natural environment, learning aspects could also be a motivation factor for ecotourists (Weaver, 2001b). From personal tour guides to less structured interpretation including guide books, it provides information that enhances knowledge and personal interests (Ham, 1992). Often seen in outstanding natural environmental areas, natural attractions speak for themselves without interpretation (Tilden, 1977), and therefore ecotourism experiences sometimes mean to simply observe and feel the natural environment (Weaver, 2001a). This encourages individual interpretation and leads to appreciation of the environment (Weaver, 2001b).

Practically interpretation is a key management tool that addresses environmental impacts caused by the growth of visitors in many national parks (Tubb, 2003). While inappropriate

behaviour of tourists such as littering and walking off a designated track, are often detected as causes of environmental damage, they often stem from a lack of knowledge on how to behave correctly within the place, rather than intentional acts (Ham, Brown, Curtis, Weiler, Hughes & Poll, 2009). Interpretation can help minimise negative impacts of tourists on sites through education of tourists on how to behave in natural environmental settings (Moscardo, 1999, Wearing, Edinborough, Hodgson & Frew, 2008).

While various outcomes of interpretation can be categorised into two major groups: minimising negative environmental impacts and improving quality of experience through understanding, these benefits stem from knowledge gain, attitude change and behavioural change. Yet, a question, whether interpretation leads to a change in knowledge, attitude and behaviour in practice, arises.

Researchers have demonstrated clear knowledge gain through interpretation in ecotourism settings (Beaumont, 2001, Tubb, 2003). Beaumont (2001) found that the percentage of people who thought they have good or detailed knowledge increased from 36% to 53% after exposure to interpretation. Similarly, in a comparison between visitors who experienced a Visitor Centre in Dartmoor National Park, and those who had not, Tubb (2003) found that the former had a clear knowledge gain. However, neither study found changes in participants' attitude or behaviours that are as clear as those found in other studies (Armstrong & Weiler, 2002, McNamara & Prideaux, 2010).

Even if a small degree of attitude change among those who were exposed to interpretation was detected, the changes took place only in specific environmental issues of the National Park, and broader issues including general beliefs towards the environment, without extending the understanding to the importance and appreciation of the Park or larger environmental/social/political issues (Tubb, 2003, Kim, Airey & Szivas, 2011).

Beaumont (2001) identified that pre-existing attitudes of participants of ecotourism activities which were already strongly pro-environment, prevented them from creating significant changes. For instance, 75% of visitors who had not experienced interpretation already had a moderate to strong environmental attitude and also 85% of them had moderate to strong environmentally friendly behaviour. In addition, the author points out that the focus of cognitive interpretation rather than affective interpretation on the study site is one of the contributing factors of the result. Uzzell and Ballantyne (1998) say that although cool and objective presentation and subsequent decision making is desired in our society, such cool

presentation cannot always attract people especially when dealing with many choices. It is the emotional side of our understanding and appreciation of the world that colour our memories and experiences and that attracts audiences in interpretation. They further express that if the objective of interpretation is attitude change, it is difficult to achieve the goal without affective elements.

It could also be said that one of the major reasons for preventing leading knowledge change into attitude change, and attitude change into behaviour changes stems from the failure of effective interpretation that leaves 'so what' questions unanswered. It could be the interpretation techniques that cause lack of engagement, but also visitors themselves, or external factors such as weather, other people around which can affect the degree of engagement.

Principle 3: Sustainability

A widely accepted definition of sustainability is written in the Brundtland Commission report, as "… to meet the needs of current generations without compromising the ability of future generations to meet their own needs" (Brundtland 1987, p. 43).

The concept that sustainability is multi-dimensional, has been consistent (Pulido-Fernandez, Andrades-Caldito & Sanchez-Rivero, 2014). In fact, the Brundtland report identified three dimensions of sustainability; ecological, economic, and socio-cultural (McNamara & Gibson, 2008), and these elements cannot exist without the others (Williams, Griffin & Harris, 2002). Ecological sustainability is drawn by the idea that humans and the environment have equal value, so the environment needs to be conserved to maintain the components of the biosphere by minimising impacts (Blamey, 1997, Weaver, 2001a). Comparatively, economic and socio cultural dimensions focus more on human needs (Weaver, 2001b). Ideally ecotourism operators should gain profits from their businesses to contribute to appropriate environmental protection as well as to achieve high satisfaction of tourists (Williams et al., 2002). Socio-cultural sustainability considers benefits to local people including indigenous people (Fennell, 2001). In fact, local participation in management and the decision making process is crucial to adequately protect and manage the natural resources which ecotourism relies on (Weaver, 2001b). Akama and Kieti (2007) provide a prime example of tourism development controlled by foreign investors. In Kenya, a high percentage of tourism revenue leaks overseas scarcely leaving profits for the local and national economy. Local people are rarely involved in the core and profitable tourism activities, and their role is marginal and includes informal

activities such as hawking and vending of souvenirs along the streets. As such, locals do not welcome tourism, and stress better use of the natural environment for more profitable industries such as agriculture. Akama and Kieti (2007) suggest that without benefits to local people, the quality of the tourist experience will deteriorate.

While the concept of sustainability has been elevated to a political level, and has become part of daily language globally, the Brundland Report is criticised for a lack of information about how to achieve sustainable development (McChesney, 1991). This issue still remains as noted by Weaver (2005) that no clear consensus exists over the topics including what should be sustained, what actions are sustainable and how to assess sustainability. It is seen that this ambiguity of how to implement sustainable practice is the central problem of ecotourism (Weaver, 2001b). While ecotourism certification schemes exist to differentiate ecotourism operators from greenwashing products, lack of agreed definitions of sustainability lead to operational difficulties. Medina (2005) presented a case that indicators of economic, environmental and socio-cultural sustainability in certification programs still possess definitional issues. To illustrate, 'benefits' to different stakeholders such as local people and business operators mean different things, while who is local is also a problematic issue (Medina, 2005). When international enterprises dominate tourism businesses and indigenous people are employed by them, economic benefits to business operators will produce fewer economic benefits to local people. The term, 'benefits' can be problematic and therefore should be understood differently to suit different needs of stakeholders in each tourist destination (Medina, 2005). Weaver (2005) also noted that whether ecotourism should look at the scope of the outcomes (benefits) at regional levels or global levels remains unanswered.

Clarke (1997) noted that understanding of sustainability in tourism has shifted over time. This is because as Hunter (1997) states, sustainability is a concept that is evolving, complex and adaptive. Recently studies of sustainability in tourism have moved from fighting for appropriate definitions of sustainability to movement for the right direction with sustainability as an objective (Clarke, 1997). The idea that that regardless of scale, sustainable tourism should be a goal to aim for (Clarke, 1997), is practice oriented (Gossling, 2016). Such trends are also documented in the study of Lu & Nepal (2009) who reviewed papers published in the Journal of Sustainable Tourism over 15 years from 1993 to 2007. They found that the recent research focus has shifted to how to operationalise sustainable practice (Lu & Nepal, 2009). Currently in practice, balancing all the goals (environmental, economic and socio-cultural sustainability) is unrealistic, therefore it is inevitable to trade off

dimensions in priorities (Lu & Nepal, 2009). Yet a recently growing consensus is that sustainable development of tourism cannot be identified as an ideal goal linked to a fixed state of harmony but as an ongoing process of adaptation and reorientation of tourism development towards achieving the desired balance between social, economic and environmental factors (Pulido-Fernandez et al., 2014).

The outline of three principles of ecotourism has demonstrated that ecotourism is operated in relatively undisturbed environments. Interpretation functions as a type of communication that can encourage tourists to understand the value of the place, therefore promoting appreciation and respect towards it. Sustainability is understood as a concept to satisfy needs of both current generations and future generations with the aim to achieve ecological, economic and socio-cultural elements. However, it has also demonstrated the difficulties to deliver effective interpretation in practice and sustainable practice that achieve all dimensions of the sustainability. In particular, how to operationalise sustainability has been the ongoing focus of recent tourism research. This section suggests that the approach to study ecotourism by establishing principles instead of defining the term also faces complex issues. The following section also further states that the lack of an agreed definition leads to practical issues of ecotourism.

2.3.3 Ecotourism in practice

Fennell and Weaver (2005) argue that ecotourism faced a crisis of credibility. In the absence of an agreed definition, a large number of tourism businesses sold themselves as ecotourism operators, without knowing or following the core criteria of ecotourism (Weaver, 2001a, Fennell & Weaver, 2005). Industry and government often used the term ecotourism by focusing only on the 'nature based' aspect. The important element of environmental management, sustainability, is separated from ecotourism, but often left under a category of sustainable tourism (Buckley, 2009). It was often the case that tourism businesses took advantage of 'green' marketing by dressing up existing tourist attractions or accommodation with ecotourism labels (Orams, 1995). In this case, those businesses were not that different from traditional forms of tourism.

As one solution, increasing attention was given to voluntary schemes that set up guidelines for good practice and methods to recognise those companies meeting such standards, through accreditation and/or certification (Font, 2002). While accreditation includes an agency or organisation that evaluates and recognises a programme of study or institution as meeting

certain standards or qualifications, certification is applied to individual businesses to test their knowledge although the two are used interchangeably (Newsome et al., 2002). It is hoped that such schemes guarantee the quality, reliability and safety of products to customers while the operators gain competitive advantages in marketing (Martysek & Kriwoken, 2003)

However, lack of consistent standards and criterion of accreditation and certification, resulted in too many eco-labels with different meanings (Font, 2002). Font, Sanabria and Skinner (2003) argued that according to the World Tourism Organization, there were over 70 similar certification programs worldwide in 2002, although many failed to provide comparable standards and criteria. Font (2002) believed that takeovers, mergers and alliances that created stronger brands were a crucial step to gain a market share that allowed economies of scale in communicating the green message to the international tourist market. Nevertheless, as noted, the voluntary industry qualifications did not possess regulatory power to enforce all operators to be certified under such programs (Newsome et al., 2002).

Ecotourism in practice has generated several issues that the industry has tried to combat. As regulatory conditions developed in the practice of ecotourism the arguments continued in Academia about the definition of the concept. McKercher (2010) went as far as to suggest that extensive academic attention focussed on ecotourism encouraged the development of the industry segment. In demonstrating the longevity of definitional debate surrounding ecotourism, Buckley (2010) was robust in his rejoinder indicating that McKercher's contentions were unsubstantiated by evidence. Wheeller (1993), a long standing critic of ecotourism, published in the first volume of the Journal of Sustainable Tourism a pessimistic account questioning whether ecotourism was merely marketing window dressing to convince tourists they were acting responsibly towards local people and the environment. In 1997 he went further suggesting that ecotourism was "nothing more than astute short term business practice, part of the conventional tourism industry which utilizes the same infrastructure, is driven by the same motivation, namely profit, and that 'everybody's doing it, doing it, doing it" (Wheeller, 1997, p. 48). Fennell and Weaver (2005) on the other hand not only supported the idea that ecotourism could be operationalised but along with his collaborators asserted the route to encouraging effective ecotourism was by recognising that ecotourists could be classified into softer and harder segments, a concept that will be explored in the next section.

Section 2.3 has provided an historical review of ecotourism literature to understand the background and emergence of ecotourism. While definitions and principles of ecotourism have been researched for decades, universally agreed definitions have not surfaced leading to problems with the operationalization of ecotourism in practice. The presence of tourism businesses who took advantage of green marketing without following the principles of ecotourism (Font, 2002) and a lack of regulatory control to manage such business practices, also created contested interpretations of ecotourism business (Newsome et al., 2002). Some commentators have suggested that ecotourism is more fantasy than reality (Wheeller, 2007) but Fennell and Weaver (2005) contend that further research into the characteristics and motivations of tourists experiencing ecotourism may indicate that the concept can exist in the real world and lessons to reduce the negative impacts of tourism can be learned. Therefore, the focus of this study transfers to 'ecotourists' resulting in the revelation of the research opportunity in the study of ecotourists.

2.4 Study of Ecotourists

2.4.1 Who is an 'ecotourist'?

In 1997, Palacio and McCool argued that compared to various definitions of ecotourism, the term ecotourist was poorly defined. Wight's research of 1996 and 2001 suggested that any participant in nature based activities was being identified as an ecotourist leading Perkins & Brown (2012) to conclude that in the 1990s the accepted approach to ecotourists was to view them as a homogenous group of nature based tourists. As an illustration, Eagles' (1992) study aimed to differentiate the motivations of Canadian ecotourists from mainstream tourists. His study demonstrated that both cohorts wanted to escape daily life but ecotourists were much more likely than their mainstream counterparts to choose natural environmental settings and nature based activities. However, ecotourists were not distinguished from nature based tourists strengthening the view that nature based tourists (including ecotourists) were a homogenous group of tourists participating in similar activities for similar reasons.

As the demand for nature based tourism activities grew (Balmford, Beresford, Green, Naidoo, Walpole & Manica, 2009), the need to understand the motivations of ecotourists became more critical. In addition, the proliferation of ecotourism type businesses, some of whom had sought and achieved ecotourism accreditation but many of whom had not, increased the need for research in this market. Twenty years ago studies signalled confusion among consumers as to what an ecotourism business should look like suggesting their main motivation was to

experience a nature based activity rather than being committed to the principles of ecotourism (Bricker & Kerstetter, 2002). As more research emerged the idea that a range of motivations may be influencing the behaviour of nature based tourists gained credence.

Segmentation studies focussed on a range of variables as a basis for separating groups of consumers, and used psychographic and demographic information on them to describe each segment and identify their different consumption requirements that can be satisfied by different marketing mixes (Zografos & Allcroft, 2007). Market segmentation in ecotourism has incorporated psychographic variables to enhance the segmentation power of demographic variables such as age and gender. Psychographic concepts are a mix of beliefs, values, attitudes, motives, needs, desires, and commitments (Blamey & Braithwaite, 1997). By examining personality variables and preferences for lifestyle, psychographic values aimed to add to the explanation of consumer preferences to consume goods and services (Zografos & Allcroft, 2007).

Psychographic approaches use either needs, or values, or both as the basis of market segmentation (Blamey & Braithwaite, 1997, Zografos & Allcroft, 2007). As explained by Blamey and Braithwaite (1997, p. 31), studies concentrated on "needs, and the states of arousal or motives that lead to the satisfying of these needs". Additional studies on needs and motives focussed on benefits (Palacio & McCool, 1997), travel motives (Cleaver & Muller, 2002), and attraction and social motivations (Eagles, 1992). Yet, more recently value based ecotourism market segmentation studies have become available such as those focusing on social values (Blamey & Braithwaite, 1997), environmental values (Zografos & Allcroft, 2007), and personal values (Cleaver & Muller, 2002).

As the 1990s progressed, the trend towards ecotourist segmentation studies was confirmed. Palacio and McCool (1997) for example justified their research focus on ecotourist segmentation by arguing that research which continued to search for an agreed definition of ecotourism was unproductive. Their study segmented travellers to the well-known ecotourism destination, Belize. The study indicated that one of four segmented groups had the highest score in each of four domains which formed the key principles of ecotourism. They named the group 'ecotourists' (Palacio & McCool, 1997). In their study of participants of nature based tours in Fiji, Bricker and Kerstetter (2002) gave the name 'Ecotourists' to a group who placed high importance on 'eco' and cultural dimensions from a choice of six motivational dimensions (adventure, tranquillity, eco, cultural, guides and family). Notably, both studies also identified three other groups who had different motivations. For instance, Palacio and

McCool's 'Passive Player' placed low value on all the key principles of ecotourism (Palacio & McCool, 1997) while culture was a stronger motivation for travel than the natural environment for Bricker and Kerstetter's (2002) 'Culture Buffs'. It can be argued that the characteristics of these groups might extend beyond the definition of ecotourism however the disclosure of distinct groups of nature based and ecotourists indicates the inadequacy of defining nature based tourists and ecotourists as homogenous.

Although attention had altered to focus on segmentation, few studies have been completed. A summary of some of the main empirical studies related to ecotourism market segmentation is given in Table 1. From the Table it was clear that theoretical and empirical studies demonstrated that the ecotourism market could be segmented and was not homogenous (Weaver & Lawton, 2001, Wight, 2001, Fennell, 2003).

Table 1: A comparison of empirical ecotourism studies

Authors	Key Measurement	Name of segments	Characteristics of segments
Palacio & McCool (1997)	Expected benefits ①Escape ②Learn about nature ③Healthy activity ④Cohesive	1. Ecotourists	Highest average scores for all four expected benefit domains
		2. Nature Escapists	Appreciating and learning about nature; escape to nature
		3. Comfortable Naturalists	Moderate interest in appreciating and learning about nature; escape to nature
		4. Passive Players	Low interest on all benefits
Bricker & Kerstetter (2002)	Expected benefits ①Escape ②Learn about nature ③Healthy activity ④Cohesive	1. Eclectic travellers	All six dimensions high
		2. Ecotourists	High importance on environment and culture dimension
		3. Eco-Family travellers	High importance on environment, culture and family
		4. Culture Buffs	High importance on culture
Weaver & Lawton (2001)	Behaviours	1. Harder Ecotourists	Nature-based learning, risky and challenging
		2. Structured Ecotourists	More structured (e.g. guided tours) and small

			groups ; learn about nature
		3. Softer Ecotourists	Less preference for physical challenge, risk and lack of comfort
Zografos & Allcroft (2007)	Environmental values ①Criticism in human attitude ②Confidence in human skill ③Belief in species equality ④Concern with Earth Limits	1. Disapprovers	Traditional green ideology
		2. Scepticals	Unique combination of ecocentric environmental values and lack of concern towards the limits of the earth and its resources
		3. Concerners	Overall pointing towards a dominance of human development and welfare environment values, and strong rejection of ecocentric value, but strong concern towards limits of the earth
		4. Approvers	Opposite of 'Disapprovers', confidently approve current patterns of human development
Blamey & Braithwaite (1997)	Social values ①Development and Control ②Equality and Harmony ③Rights	1. Ideological Greens	High support for Equality & Harmony and Rights; low support for Development & Control
		2. Dualists	Support for Development & Control; Equality & Harmony
		3. Libertarians	Little regard for Equality & Harmony; high regard for Rights
		4. Moral Relativists	Not particularly supportive of any value domain

One measurement, 'expected benefits,' identified as benefits participants expect in recreational engagement in natural settings, used by Palacio and McCool (1997) was also employed in the follow up study by Bricker and Kerstetter (2002). Expected benefits consist of four domains ① Escape (the desire to escape from the pressures of everyday life), ② Learn about nature (the importance of appreciating and learning about the natural environment), ③ Healthy Activity (the importance to enhance the respondent's health and maintain themselves in good physical condition), ④ Cohesive (the importance of sharing

recreational experiences with friends and family). Yet, Bricker and Kerstetter (2002) used six dimensions of motivations they found in the study as the base to segment the participants; adventure, tranquillity, eco, cultural, guides and family. As a result, the segments largely differ in the two studies.

From behaviour based measurements, Weaver and Lawton (2001) studied eco-lodge guests in Lamington National Park, near the Gold Coast. Three kinds of ecotourists; 'Harder Ecotourists', 'Structured Ecotourists' and 'Softer Ecotourists' were identified. The study stated that 'Structured Ecotourists' were situated in the middle between the 'Softer Ecotourists' and 'Harder Ecotourists'. While detailed descriptions of these groups are given in the next Section 2.4.2, this suggested that ecotourists could be arranged along a spectrum.

In 1997, Blamey and Braithwaite conducted a study of market segmentation in ecotourism using social values. Zografos and Allcroft (2007) subsequently tested environmental values as key measurements to segment the ecotourism market. Blamey and Braithwaite (1997) found that 'Ideological Greens' who held the highest social values and identified the value of nature as good in its own right and attributed it to religious or spiritual significance. 'Dualists' held the second most supportive position of the three social values on average, followed by 'Libertiarians'. 'Moral Relativists' did not show their support for any kind of values, and they were seemingly the least supportive of the value of nature. Zografos and Allcroft (2007) identified four groups of segments: 'Disapprover' who held an ecocentric mind-set, 'Approver' with clear anthropocentric values, 'Sceptical' with a unique combination of ecocentric environmental values and a lack of concern towards the limits of the earth and its resources, and finally 'Concerner' with a combination of anthropocentric values with strong concern towards limits of the earth.

While ecotourism market segmentation helps ecotourism operators more effectively offer services and facilities suited to their visitors (Brandon, 1996), a lack of consistency in the terminology and methodology of segmentation studies makes it difficult to generalise from their findings. Unfortunately the selection of a range of key measurements by the different studies, results in different terminology being adopted to describe each segment of the ecotourism market. Each study reveals different dimensions of ecotourists, however, no study aimed to understand and integrate 'who are ecotourists' in general. However, segments found in these studies are in a spectrum based on the key measurements as suggested by Weaver and Lawton (2001). The spectrum of ecotourists seems to be the key to integrate these

different results of ecotourism market segmentation. The next section introduces the concept of the Spectrum of ecotourists developed by Weaver and Lawton (2001).

2.4.2 The Soft and Hard Ecotourist Spectrum

The shift of focus to ecotourism market segmentation generated attention on the concept of a soft to hard Spectrum, developed largely based on behaviours (Weaver & Lawton, 2001, Weaver & Lawton, 2002, 2007, Collins-Kreiner & Israeli, 2010). Soft and hard dimensions are two types of ecotourism originally classified by the spectrum of ecotourism activity (Weaver & Lawton, 2001). Firstly noted by Laarman and Durst (1987), soft and hard dimensions of ecotourism were distinguished by the participants' physical rigour and the level of interest in nature. According to them, hard ecotourism experiences were characterised as more rigorous experiences that required increased dedication to the nature-based activity (Laarman & Durst, 1987).

Weaver and Lawton (2001) generated a Spectrum of soft and hard ecotourists as shown in Table 2. At the hard end of the Spectrum, ecotourists are described as having a strong environmental commitment who seek physical and mental challenge in their experience and who travel in small groups for longer durations (Weaver, 2001b). They are also characterised as expecting few services or facilities in wilderness settings, whereas soft ecotourists look for superficial encounters with nature and expect extensive services and facilities (Weaver & Lawton, 2001). Soft ecotourists travel in larger numbers, and rely on the formal travel industry such as travel agents. While their study of eco-lodge guests found three types of ecotourists; harder, structured and softer ecotourists, softer ecotourists were referred to as 'softer' rather than 'soft' due to the fact that all guests had chosen to stay in an eco-lodge overnight thus implying a degree of adherence to ecotourism. Similarly 'harder' ecotourists are considered to be less 'harder' than 'hard' as ecotourists staying in an eco-lodge are not as hard as those staying in their own tents or un-serviced settings. Structured ecotourists are situated in the middle between the softer and harder ecotourists (Weaver & Lawton, 2001). The Spectrum explains that the majority of ecotourists are arranged along the Spectrum with few being located at either extreme (Weaver & Lawton, 2001).

Table 2: The spectrum of soft and hard ecotourists (Weaver & Lawton, 2001, Fennell & Weaver, 2005)

HARD ← the ecotourism spectrum → SOFT	
Strong environmental commitment	Superficial environmental commitment
Specialized visits	Multi-purpose visits
Long trips	Short trips
Small groups	Larger groups
Physically active	Physically passive
Physical challenge	Physical comfort
Few if any services expected	Services expected
Deep interaction with nature	Shallow interaction with nature
Emphasis on personal experience	Emphasis on interpretation
Make own travel arrangements	Rely on travel agents & tour operators

Increasingly the Spectrum has been applied to specific tourism sites to identify the types of visitors ecotourism businesses attract. For instance, Collins-Kreiner and Israeli (2010) examined which types of ecotourists who visited Agmon Lake in Israel, a popular attraction for bird watchers, in order to understand what is required to satisfy these visitors. Their research findings suggest that most visitors prefer soft versions of ecotourism that combine elements of ecotourism with conventional characteristics of mass tourism, such as developed facilities and attractions (Collins-Kreiner & Israeli, 2010). By disclosing the heterogeneous market, ecotourism operators can more effectively offer services and facilities suited to their visitors (Brandon, 1996).

This study understands that the notion of the soft and hard Spectrum is a key strategy to integrate the differing ungeneralisable results of other empirical studies of ecotourism market segmentation. Although names of segments found in other studies all vary, each study found segments in the spectrum based on the key variables used as the basis to differentiate people. Therefore, integration of findings of other studies into the Spectrum could enhance the knowledge of the spectrum of ecotourists. For instance, although the Spectrum clearly outlines the characteristics of ecotourists, it is unknown to what extent the distinguishing factors of soft and hard dimensions of ecotourists have synergies with studies discussed previously. The comparison will not only evaluate the credibility of the Spectrum, but also propose additional dimensions that should be included in the Spectrum.

2.4.3 Evaluating the Soft and Hard Spectrum

It is important to examine to what extent other empirical studies on ecotourists agree with the distinguishing factors of hard and soft ecotourists. Table 3 presents a comparison of the study of Weaver and Lawton (2001) with studies previously discussed, however Bricker and

Kerstetter (2002) has been excluded due to a lack of detailed comparable information. The table particularly focuses on characteristics of hard ecotourists (Weaver & Lawton, 2001) for ease of comparison.

Table 3: A comparison of the ten dimensions of the hard element of the Soft and Hard Spectrum with other empirical studies

Hard ecotourists are	Palacio & McCool (1997)	Weaver & Lawton (2002)	Zografos & Allcroft (2007)	Blamey & Braithwaite (1997)
Strong environmental commitment	◯	◯	◯	Δ
Specialised visits	Δ	◯		
Long trips	×	◯	×	
Small groups	◯	◯	×	
Physically active	◯	◯	◯	
Physical challenge	◯	◯		
Few if any services expected		◯		
Deep interaction with nature	◯	◯		Δ
Emphasis on personal experience		◯		
Make own travel arrangements		◯		

O – strong alignment Δ - a moderate level of alignment; × - non alignment or disagreement

The only item commonly found in these studies was the strong level of environmental commitment among the hard end of the segments. Weaver and Lawton (2001) defined strong environmental commitment based on positive attitudes towards participating in volunteer works, donating extra money to support ecotourism sites such as national parks, and pointing out a person with irresponsible environmental behaviour. Similarly, Blamey and Braithwaite (1997) indicated that the hard end of their segments, 'Ideological Greens' followed by the second hardest segment, 'Dualists', showed great environmental commitment through their

obligation to purchase eco-friendly products and to donate to environmental groups. However, their 'Ideological Greens' were least in favour of entrance fees to National Parks which does not align with Weaver and Lawton's (2001) hardest segment. Moreover, Zografos and Allcroft (2007) study shows 'ecocentric minds' among the hardest of their segments including concerns about current human behaviour towards nature as well as a belief in equal rights between humans and animals.

The comparison of Weaver and Lawton (2001) and Zografos and Allcroft's (1997) work highlights the complexity of aligning the findings of various studies conducted on ecotourists. Despite the display of some degree of alignment to the Spectrum, it is important to note that 'environmental commitment' that Weaver and Lawton (2001) generated from their respondents' attitudes towards behaviour based statements differs from the 'environmental values' which formed the focus of Zografos and Allcroft (2007) study. In addition, Blamey and Braithwaite's (1997) research examined social values rather than environmental values. These two studies promote the idea that values could be a crucial aspect in the segmentation of ecotourists, since these studies did not display a great deal of alignment with the study of Weaver and Lawton (2001) but both generated valuable findings about ecotourist segments.

A second item in Table 3 that recorded some level of agreement across hard ecotourism segments was the need to be physically active. The physically active condition was measured by a willingness to do a long hike in bad weather to see fauna and flora (Weaver & Lawton, 2001). Palacio and McCool (1997) found that actual participation in a wide range of outdoor activities such as hiking, snorkelling, camping, diving, sailing were more popular among harder segments, compared to softer segments who participated in limited outdoor activities.

In addition, Zografos and Allcroft (2007) found that soft segments are likely to choose 'relaxing' as their main activity during their leisure time. Interestingly, Eagles' (1992) study argued that ecotourists seek to have a completely different adventure from daily life, while mainstream tourists focus on relaxing, having a break, and doing something similar to daily life. The similarity between some of the softer segments of the ecotourism market and mainstream tourists is often highlighted, leading to a discussion of whether soft ecotourists are in fact different from mass tourists (Fennell & Weaver, 2005). Yet it is beyond the scope of this chapter to enter this discussion as the focus is given to evaluating the acceptance of the Spectrum.

In Table 3, the symbol Δ was applied to where a moderate level of alignment was found. For instance, 'Ecotourists' and 'Natural Escapists' participated in a wider range of activities than 'Comfortable Naturalists' and 'Passive Players' (Palacio & McCool, 1997). This finding appears to contradict the notion of the 'specialised visit' of hard ecotourists. Weaver and Lawton (2001) identified that soft ecotourists enjoy ecotourism activities as one of multiple purposes of their trip, while hard ecotourists have a specialised purpose. However the range of outdoor activities they referred to included swimming, hiking, sailing, canoeing, photography, snorkelling, camping, viewing wildlife, diving, birding, visiting ruins, fishing and did not include general tourism activities such as food and wine sampling, and visits to theme parks, events, and night life. Thus, participation in a range of outdoor activities may still be summarised as specialised outdoor activities and sit under the category of a 'specialised visit'

If deep interaction with nature is explained by willingness to learn about nature, the two studies imply a great degree of alignment. According to Palacio and McCool (1997), the hard end of the segments had higher expectations about learning than softer segments. This includes items such as "observe the scenic beauty" "learn more about nature" "understand the natural world better". Similarly, Blamey and Braithwaite (1997) emphasised stronger support for the environment among 'Ideological Greens' than any other group. Whereas all the segments showed their agreement with the spiritual side of nature and the importance of the intrinsic value of nature, 'Ideological Greens' exhibited significantly stronger support. These studies imply harder ecotourists seek deeper interactions with nature, due to their willingness to learn about nature. Yet the study of Weaver and Lawton (2001) does not directly specify the procedure used to measure deep interaction with nature.

A further discrepancy between Weaver and Lawton's (2001) Spectrum and the studies in Table Three involves length of stay. Weaver and Lawton (2001) suggested that harder ecotourists prefer a longer length of stay (18 days) than softer ecotourists (15.7 days), but Zografos and Allcroft (2007) did not find any clear differences between the four segments. Palacio and McCool (1997) even found that the hard end of their segments had the shortest duration of stay with 6.5days, although the longest duration of stay was among the second soft group (10.5 days) followed by the soft end of segment (8.5 days). According to Palacio and McCool (1997), softer participants stay longer in the region.

The aim of the comparison shown in Table 3 was to ascertain the level of synergy of the Spectrum developed by Weaver and Lawton (2001). After the comparison it is clear that the

ten factors used by Weaver and Lawton (2001) to differentiate hard from soft ecotourists are only partially synergised or even challenged, or not even examined due to the different focus of the other studies. As demonstrated in Table 1, all studies in the field concentrated on values or motivations as the basis of their segmentations, while the Spectrum focused on behaviour. Research that has focussed on motivation and/or values has used psychographics to locate segments of ecotourists. As the Spectrum has been shown to have limited synergy, it is worth exploring a new approach that integrates values into the Spectrum.

2.4.4 Lack of value factors

Juric, Cornwell and Mather (2002) indicated that segmentation of ecotourists based on behaviour has limited value. They argue that while studies of ecotourists focus on profiling demographic characteristics and behaviour, identification of ecotourists based on a singular behaviour raises concerns. Whereas the Spectrum of Weaver and Lawton (2001) identifies soft and hard dimensions of ecotourists through multiple behaviours, the behaviour on which the ecotourism definition rests varies from study to study. Therefore a lack of generalisability makes it difficult for future researchers to use the approach (Juric et al., 2002) adding weight to the argument that the Spectrum requires some degree of modification.

On the other hand, as psychographic concepts incorporate beliefs and values (Blamey & Braithwaite, 1997) and take into account lifestyle preferences, they may be useful in developing a deeper understanding of ecotourists (Zografos & Allcroft, 2007). As argued by Blamey and Braithwaite (1997), values are limited in number, and therefore can be generalised. Values are core beliefs that influence action as well as behaviour, and they are enduring, having better predictive ability in relation to expected behaviour (Blamey & Braithwaite, 1997). Consequently it seems logical that the Spectrum could be enhanced by the addition of values.

Values are defined in the social sciences as

> an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach 1973, p. 5).

Values are essential to how individuals see their world (Becker & Connor, 1983), and they are both self-centred and social centred in the sense that they are at the cross road between the individual and society. They are driving factors of selection and justification of people's behaviours. Generally values are distinguished from attitudes. While attitudes are defined as

general evaluations people hold in regard to themselves, other people, objects and issues, values are more enduring and all-embracing concepts (Williams & Lawson, 2001). Thus values are attitudes toward extremely abstract objects, in other words, strong attitudes which influence a much wider range of other attitudes (Williams & Lawson, 2001). In addition, Rokeach (1973) also argued that whereas attitudes are about particular objects and circumstances, values are about abstract positive or negative ideals on any particular object or circumstances. Therefore, attitude is understood as the application of a value to a specific object or situation. In addition values are considered to be more stable than attitudes since they are believed to be more central to an individual's cognitive system (Crick-Furman & Prentice, 2000).

Crick-Furman and Prentice (2000) report that despite a great deal of academic interest in values, a satisfactory methodology for measuring 'values' has had little success. The difficulty of measuring values lies in the fact that values are not observable, but are researchers' construct (Crick-Furman & Prentice, 2000). For instance, established measurements of values such as the Rokeach Value Survey (Rokeach, 1973) and the List of Values (Kahle, 1983) have been criticised for being abstract. These survey based measurements lists statements that are vague and irrelevant to the current context of individuals (Crick-Furman & Prentice, 2000). However, it depends on how well a person engages in self-reflection, since only those who previously considered them might be able to identify the 'abstract' values. Hence, true values are difficult to capture (Shrum, McCarty & Loeffler, 1990).

Two studies that have been discussed represent rare empirical studies of value based ecotourism market segmentation. Blamey and Braithwaite (1997) state that their study was the first to examine tourism segmentation using social values, while Zografos and Allcroft's (2007) later research segmented ecotourism markets using environmental values.

According to Zografos and Allcroft (2007), environmental values are those values people hold about the relationship between humans and their natural environment. They typically range from pure anthropocentric to pure ecocentric. Anthropocentric environmental values, are also known as instrumental values they consider nature to be valuable because humans can benefit from nature directly or indirectly, as well as culturally and spiritually. The idea that nature should be preserved for future supplies of products, the good of humanity and quality of human life is commonly held among developers. Water systems, atmosphere and soil maintained through ecosystems sustained via appropriate protection of reserved land

provides daily supplies of food, water, and clean air (Worboys, Lockwood & DeLacy, 2005). A sense of identity, pride and connection to culture and nature are also given and such spiritual and cultural aspects of environmental values are often believed by local people (Worboys et al., 2005). All these values appreciate that nature primarily exists as a resource to serve human needs. On the other hand, ecocentric environmental values, also known as intrinsic values, understands that nature is valuable without providing advantages to humans and it has its own right to exist (Lockwood, 2010). Environmentalists and conservation organisations hold these values (Lockwood, 2010). Clearly anthropocentric and ecocentric values exist quite contrary in the spectrum.

The study of environmental attitudes has attracted significant attention and researchers generate new measures of environmental attitudes for almost every study they conduct (Hawcroft & Milfont, 2010). Among those, the New Environmental Paradigm (NEP) has been considered to be one of the most successful measurements of environmental attitudes recently. The NEP measures environmental attitudes, beliefs and values (Dunlap, Van Liere, Mertig & Jones, 2000). It is thought to measure 'primitive beliefs' that is the inner core of a person's belief system and basic truths about physical and social reality and of nature itself, about the nature of the earth and humanity's relationship with it (Dunlap et al., 2000). Zografos and Allcroft (2007) measured environmental values based on 15 statements of the NEP. In their analysis, Zografos and Allcroft (2007) summarised the NEP into four domains, ①concern with the perception of human domination of nature ②confidence in what human development is heading towards ③belief in species equality ④concern with earth limits. Clearly, all the themes deal with concerns about the power relationship between human and nature.

Having proposed the potential use of environmental values as a differentiating factor of hard and soft ecotourists, the limited spectrum of environmental values among ecotourists must be acknowledged. Zografos and Allcroft (2007) concede that the benefit of using environmental values as the sole variable to segment the ecotourism market is restricted as different segments are likely to hold similar ideas about what ecotourism should be. For example, all the segments found in their study agreed that the most important element of ecotourism was conservation of biodiversity, and they did not show any significant differences in attitude towards ecotourism. In addition, 'Disapprovers' who hold ecocentric values and 'Approvers' who have anthropocentric values sometimes provided the same response when there should be opposing answers. Similarly one of the first ecotourism studies which identified

environmental attitudes among two age segments (under 65 and 65+) also found that in general both age groups commonly hold ecocentric values rather than anthropocentric (Lawton, 2002), emphasising the similarities of environmental values among ecotourists.

On the other hand, Blamey and Braithwaite (1997) have shown the relevance of environmental values when integrated with social values. Since their key measurement was social values which partially consists of concerns of environmental issues, the study was able to detect different values of ecotourists in a bigger scale. This implies the potential use of the combination of social values and environmental values in segmentation study of ecotourists.

While personal values are associated with the ideal one has about one's own private life, social values are about how the world, country and community should be (Blamey & Braithwaite, 1997). Blamey and Braithwaite (1997) argue that since the product of interest, the environment is a social and public good, social values could function as a useful segmentation variable in the area of ecotourism. In contrast, Lockwood (2006) explains that the values people place on the environment are not only constructed by society, but influenced by different cultures and experiences. Despite the presence of such influence and direction towards the objective condition of the world, they are fundamentally subjective (Lockwood, 2006). These arguments suggest that people's subjective view towards the environment can be measured by social values.

This study proposes the potential to improve the Spectrum by integrating psychological items such as values into the Spectrum. The study understands that the notion of the soft and hard spectrum is a key strategy to integrate the differing ungeneralisable results of other empirical studies of ecotourism market segmentation. In addition, this study found that while the Spectrum distinguishes ecotourists based on behavioural characteristics, this approach differs from other studies of ecotourism market segmentation, which have tended to focus on psychographic variables such as values. Values are core beliefs that influence behaviour, and they are enduring, having better predictive ability in relation to expected behaviour (Grunert & Juhl, 1995). Studies by Blamey and Braithwaite (1997) and Zografos and Allcroft (2007) have shown value based segmentation of the ecotourism market can provide a deeper understanding of the segments. Yet value based segmentation studies alone cannot provide useful and practical implications of characteristics of ecotourists for ecotourism businesses. Therefore there is a need to add values to the Spectrum and to test if the segmentation power is enhanced. The next Section 2.5 introduces multi-day walks as an ecotourism activity, therefore providing a great context for this study.

2.5 Multi-day walks

In this study, Multi-day Walks (MDWs) have been selected as an ecotourism activity that satisfies the existing principles of ecotourism. This section firstly identifies MDWs as recreational walks. Then it will look at how MDWs meet ecological, economic and social dimensions of sustainability. This section argues that while MDWs in wilderness settings provide social benefits for walkers and economic benefits for preserving nature, careful management of the activity is crucial for maintaining these positive outcomes and also ecological sustainability. Particularly, the study points out a need to understand multi-day walkers.

2.5.1 Multi-day walks as a leisure activity

Kay and Moxham (1996) state that walking is a recreational activity that is diverse and dynamic. By classifying recreational walks into 20 types, their study demonstrated a wide range of walks that satisfy different individuals. In general, walking is considered as easy, casual, relaxing and sociable, capable of spontaneous participation (Kay & Moxham, 1996). While such a description generally applies to walking types such as strolling and wandering, contrasting characteristics including challenge, reward, thrill and excitement of adventure are also seen in other types of walking. Examples of these walks are termed as peak bagging, hill walking, back packing, trekking, hiking and trail walking. These walks require planning and preparation and only attract a minority of dedicated walkers. Since they provide an opportunity for achievement and self-development, it extends recreational walking into the range of outdoor activity such as high risk action sports (Kay & Moxham, 1996). Despite the absence of the category ‘multi-day walk’, this description introduces the extreme type of walking that is the focus of this study.

A multiday walk is identified as a kind of recreational walk that is extended to a multiday holiday and the destination is on a continuous path (den Breejen, 2007). Walks should generate holistic and integrated personal environment relationships, and not just be a connection between places (Hugo, 1999). From the Way of St James, the first UNESCO approved pilgrimage walk to the shrine in the Cathedral of Santiago de Compostela in Spain to Mt Everest Base Camp in Nepal which extends to the highest peak of 5,545m, MDWs can improve cultural heritage sites and wilderness. The focus of this study is given to walks in the wilderness. MDWs in the wilderness often offer huts and/or camping sites for overnight stays

and walkers carry food and protective clothes to overnight on the trail, although a range of levels of comfort through guided walks are often available (Saunders et al., 2013).

MDWs are scarcely studied in academic research (den Breejen, 2007, Crust et al., 2011, Saunders et al., 2013), and still little is known about the experience of multi-day walkers (Crust et al., 2011). Consequently there is a need to understand people participating in this activity.

2.5.2 Multi-day walks as an ecotourism activity

It has been noted that multi-day walkers are ecotourism assets (Cook & Harrison, 2002). It is a desirable form of ecologically sustainable development for future generations, but also it brings a number of positive social and economic benefits to present generation (Harrison, 1998).

Ecological sustainability

MDWs take walkers to some of the most dramatic and wildest places (Crust et al., 2011). It is common that such an experience generates greater understanding of the relationship between humans and the environment, which leads to positive community environmental attitudes and ethics (Byers, 1996). Similarly, the Appalachian Trail in the United States is described as life-changing in terms of acquired self-confidence, respect for the environment, and appreciation for the simplicity of life (Luxenberg, 1994). By spending an extended period of time in nature, it is argued that walkers realise how little they need in everyday life and appreciate what they have, as well as respect for the environment (Luxenberg, 1994).

Economic sustainability

One of the economic benefits of a MDW is to create an economic justification for preserving the area (Byers, 1996). Economic benefits generated from walkers are not only walk related fees such as walker fees, transport to starting and ending points and food but also non-walk related fees, such other tourism activities. In fact, walkers on the Overland Track spent an average of 16 days in Tasmania, and the majority of them (52%) responded that they would not do another overnight walk, but do other tourism activities (Clark & Poll, 2008). This indicates the walkers on the Overland Track contribute to the State economically through tourism. In fact, the statistics from the Tasmanian Visitor Survey in the year ending 2007 indicate that the total spending of multi-day walkers in Tasmania reached $36 million, while the average spending per overnight walker breaks down to $1,752 (Syneca Consulting Pty

Ltd, 2008). In addition, Tasmania's Parks and Wildlife Service Northwest Region acting manager, Stuart Lennox (2013, pers.comm., 7 August) said that money was not the first consideration of these multiday walkers when choosing a holiday. He states that surprisingly it was the quality of the experience that these walkers seek, and they were willing to financially contribute to the preservation of national parks.

Another key economic benefit of MDWs is its publicity to create an image of the region. MDWs take walkers to spectacular scenery in some of the most dramatic and wildest places (Crust et al., 2011). For this, images taken in MDWs have strong appeal to audiences and are transformed into an images that come to represent the region. Booth, Cessford, McCool and Espiner (2011) found that the Milford Track, the internationally recognised track is clearly important to the tourism industry in New Zealand. The Overland Track in Tasmania has become a nationally recognised track in Australia, and photography taken on the track represents part of the image of Tasmania.

Yet one of the economic challenges of MDWs in wilderness settings such as the Overland Track is the high maintenance costs and operational costs. The high cost is a result of inaccessibility due to a lack of vehicle access and the park has to rely on helicopters as the main transportation. Unexpected weather can also add extra demands from the rescue of walkers, and maintenance of tracks and huts. Moreover, in 2004, Parks and Wildlife Services introduced a booking system for the Overland Track that limited the number of walkers to 60 people per day during the high season (1 October to 31 May) (Parks and Wildlife Service, 2008). Yet, a limited number of walkers means limited revenue, while the facilities and tracks need to be maintained consistently. Given the fact that these walkers do not perceive money as a first priority when choosing a holiday, the management authority should be able to balance the revenue and expense evenly by closely monitoring the costs of operation and maintenance and asking for adequate walker fees.

In his analysis of the profitability of MDWs, Cook (2008) reported that instead of targeting young backpackers who bring low economic incomes, upgrading the facilities for a wider population, especially older groups will bring more money to the track. If tracks have facilities like huts and lodges, it will attract baby boomers who have high disposable incomes and who are fit and healthy enough to participate in a MDW. They may prefer to spend more money to avoid hardship. In addition, the track might become an iconic recreational asset (Cook, 2008). Yet when MDWs are operated in pristine wilderness, it is essential to balance economic revenue with track maintenance.

Social sustainability

Recent studies on the experience of multi-day walkers gradually reveal an insight into social benefits of MDWs. One common finding is that MDWs provide walkers with a sense of well-being in a range of ways. Crust et al. (2011) studied the psychological journey of multi-day walkers in England, and also state that walkers gain a subjective sense of well-being through (i) psychological well-being such as clear relaxed mind, positive attitude, mentally refreshed, (ii) physical well-being via increased feeling of fitness and (iii) social well-being via new and enhanced personal relationships. The psychological-welling is exemplified by den Breejen's 2007 study of walkers on the West Highland Way in Scotland. He found that getting away from daily routines and relaxing mentally were two of the most important reasons for walking the track. Being away from modern technologies and responsibilities were deeply relaxing and rejuvenating experiences which led to clear thinking and a subjective sense of well-being (den Breejen, 2007). Crust et al. (2011) explain that physically challenging aspects are considered to be an integral and important part of whole experience of MDWs, as it helps make a sense of achievement more powerful and intense at the end of the walk. Booth et al. (2011) highlight the opportunity to form social relationships between family and friends and the quality of the interaction during the walk, based on their study of walkers' experience of the Milford Track in NZ. The focus of those walkers was within their groups (family and friends), although some overseas walkers appreciated the interaction with local walkers (Booth et al., 2011). Crust et al. (2011) go on to say that the interaction between other walkers on the track was the most enjoyable part of the whole experience. Shared experiences, which means having regular contact with other walkers who might be complete strangers but share similar interests in nature and walking and share the same challenging walking experience, resulted in forming inter-group relations (Crust et al., 2011).

Due to these commonly noted social outcomes, Saunders et al. (2013) studied MDWs as a vehicle exploring transformative experiences. They view that self-directed personal transformation can occur during MDWs as it is an absorbing activity that occurs for an extended period of time, with a range of facility settings (Saunders et al., 2013). This is because "Too many tours are too short. Too superficial and have qualities too much like home to result in enduring personal transformation" (Nash 1996, p. 50 cited by Saunders et al., 2013).

These studies provide the key reasons why MDWs have recently become more popular (Curtis & Zanon, 2010). In busy modern societies where mental ill-health is more

commonplace and costly to society, nature plays a vital role as a health resource (Barton, Hine & Pretty, 2009). Both exposure to nature and participation in the physical exercise, provide primary rewards of emotional well-being (Bird, 2004). Crust et al. (2011) emphasise that these social outcomes are intense among multi-day walkers compared to day walkers. In addition, absence of illness does not lead to good mental health since self-satisfaction, independence, capability, competency, achievement potential and coping well with stress and adversity are part of it (Bird, 2007). These recent studies suggest that good mental health can be achieved through MDWs.

Despite the potential of positive social outcomes for many, the activity needs effective management as local identity can be formed and lost in MDWs. Booth et al. (2011) found the Milford Track is sometimes called the 'tourist track' since there are more international walkers than local walkers. However, such a concept is misleading and in fact the track is tied to national identity and a sense of pilgrimage by local people. The Milford Track is considered to be a special place held in the hearts and minds of the nation (Booth et al., 2011). Another study, however, involving local multi-day walkers in the Fiordland National Park, in South West New Zealand (including Kepler Track, Routeburn Track, Milford Track), by Wray, Espiner and Perkins (2010) reported that a recent growth of overseas visitors to New Zealand raises an issue of anti-international tourist sentiment among local multi-day walkers. The findings support the point that local walkers view international tourists as unwanted outsiders. The study states that a presence of increasing numbers of international tourists is a threat to local's sense of identity and place. The culturally important landscape is used by outsiders who lack knowledge, skills and equipment, and who might not appreciate the value of the place. In addition, walking tracks are increasingly booked out by international visitors and locals start to lose their opportunity to enjoy the quiet natural environment (Wray et al., 2010). This study also presents that international tourists were criticized as causing major negative environmental impacts; vegetation damage, wildlife disturbance and littering and social impacts; crowds, conflicts, increased track and facility development, more aircrafts, more signs of human influence. Interestingly, the local walkers viewed that these impacts to national parks were attributed to overseas tourists rather than outdoor recreation population as a whole. In addition, New Zealand does not charge national park entry fees, therefore, they question whether overseas visitors should have the same rights of access to conservation areas (Wray et al., 2010). It implies that the Milford Track might have attracted too wide a variety of walkers. In addition, the study suggests the need to

charge a fee for national park entry to balance tension between local taxpayers and international tourists. Consequently MDWs need to be managed sensitively to maintain the cultural and environmental values attached to the areas. The activity can provide significant economical/tourism and social benefits, yet in the remote wilderness the crowds, walkers lacking knowledge or cultural/environmental appreciation seem to be an unwanted consequence that influences social identity and the cultural meaning of the place.

Section 2.5 has presented that MDWs in wilderness promote ecological sustainability by raising understanding of the relationship with nature, while economic benefits are generated from walkers in the wilderness areas as well as destination areas. The key reason for the increasing popularity of MDWs seems to be the social outcomes such as refreshed mind, increased feeling of fitness levels and social relations, which could be a transformative experience. However, previous studies also point out that these positive social outcomes could be prevented when conflicts occur between walkers. In addition, the high cost of maintaining the track of MDWs also brings difficulties of managing the financial profits from the activity.

It is noted that the market of MDWs is heterogeneous (Cook, 2008, Curtis & Zanon, 2010), since the activity does not require high income, special skills, knowledge, equipment or expertise (Cook, 2008). MDWs that provide accommodation huts and lodges such as the Overland Track and the Milford Track make the track even more appealing to a wider audience, particularly older age groups, who might prefer to spend more money to avoid hardship (Cook, 2008). However, currently available studies on MDWs seem to focus on the psychological experience of walkers (den Breejen, 2007, Saunders et al., 2013) with the assumption that the experience of all multi-day walkers is similar. Since MDWs are scarcely studied in academic research (den Breejen, 2007, Crust et al., 2011, Saunders et al., 2013), the segments of walkers participating in MDWs needs to be explored.

In this study, the Overland Track was selected as an example of a MDW to test the power of the augmented Spectrum to segment participants. The Overland Track is popular with domestic and international walkers and has a well-established range of facilities including public huts provided by the Tasmania's Parks and Wildlife Service (ie State Government) and privately owned huts that are exclusive to participants in commercial guided tours. An historical overview of the development of the track and its management system will be introduced in the next chapter.

2.6 Research gap and research questions

In the prolonged search for defining and regulating ecotourism, the study of ecotourism markets and understanding people who participate in these activities were identified as a way to add knowledge to ecotourism research. It is theoretically and empirically known that there is a spectrum of ecotourists, ranging from soft to hard. Yet available ecotourism market segmentation studies provide a lack of consistent and generalisable dimensions that distinguish the two kinds of ecotourists. With a particular focus on the Spectrum of soft and hard ecotourists originally developed by Weaver and Lawton (2001), this study proposes the potential to improve the Spectrum by integrating psychological items such as values to the Spectrum. The study understands that the notion of the soft and hard spectrum is a key strategy to integrate the differing ungeneralisable results of other empirical studies of ecotourism market segmentation. Although names of segments found in other studies all vary, each study found segments in the spectrum based on the key variables used as the basis to differentiate people. In addition, this study found that while the Spectrum distinguishes ecotourists based on behavioural characteristics, this approach differs from other studies of ecotourism market segmentation, which have tended to focus on psychographic variables such as values. Values are core beliefs that influence behaviour, and they are enduring, having better predictive ability in relation to expected behaviour (Grunert & Juhl, 1995). Studies by Blamey and Braithwaite (1997) and Zografos & Allcroft (2007) have shown value based segmentation of the ecotourism market can provide a deeper understanding of the segments. Yet value based segmentation studies only cannot provide useful and practical implications of characteristics of ecotourists for ecotourism businesses. Therefore there is a need to add values to the Spectrum and to test if the segmentation power is enhanced.

This study identifies multi-day walks (MDWs) in the wilderness as an ecotourism activity and there is a need to understand the segments of ecotourists participating in the activity. MDWs are scarcely studied in academic research (den Breejen, 2007, Crust et al., 2011, Saunders et al., 2013), and little is known about the experience of multi-day walkers (Crust et al., 2011). Few available academic studies have been conducted in understanding the dynamics of the MDW experience (den Breejen, 2007) and the psychological journey experienced by the walkers. All these studies are based on the assumption that the experience of all multi-day walkers is similar. In contrast, this study intends to research the characteristics of different groups of people who are participating in the same activity.

Therefore a research opportunity exists in augmenting the Weaver and Lawton's (2001) Spectrum with value dimensions and to more clearly differentiate ecotourists by applying the resulting Spectrum to multi-day walkers, particularly on the Overland Track. In order to address these identified gaps in knowledge, this research seeks to answer the following question:

> *To what extent does the inclusion of values in Weaver and Lawton's Ecotourist Spectrum affect the Spectrum's ability to segment Ecotourists in a multi-day walk context?*

2.7 Implications of the study

The study aimed to improve theoretical understandings of soft and hard ecotourists by integrating values into the research design. The Soft and Hard Ecotourism Spectrum developed initially by Weaver and Lawton in 2001 and modified by Fennel and Weaver in 2005 had become an accepted part of the literature on ecotourism. On closer inspection of the literature however it was found that the number of studies who have tested this model empirically in the field was limited. Much of the research in this area suggested that trying to gain an understanding of the values of ecotourists could generate more knowledge of likely behaviour. By integrating value dimensions into the Spectrum, and using the augmented Spectrum to segment Overland Track walkers, the study explored the ability of the augmented Spectrum to distinguish ecotourists. Given studies of ecotourism are primarily investigated from the supply side, this demand side study adds more knowledge to the literature about ecotourists (Sharpley, 2006, Perkins & Brown, 2012).

MDWs are scarcely studied in academic research (den Breejen, 2007, Crust et al., 2011, Saunders et al., 2013), and little is known about the experience of multi-day walkers (Crust et al., 2011). This study aimed to test whether people participating in MDWs were homogenous or could be segmented into groups. By adopting the augmented Spectrum, this study hoped to reveal similarities and differences of multi-day walkers in their values, travel characteristics, and in their attitudes to the levels of the provision of track facilities. In doing so, the study has contributed to revealing the extent to which the Overland Track and other multi day walks can be developed in the eyes of their users. The selection of the Overland Track in this study provides a case of how a popular MDW in the wilderness should be developed to improve the reputation of the walk, the quality of the experience of the walkers, but also to protect the environment from the impacts of walkers.

2.8 Chapter conclusion

This chapter has outlined the background of ecotourism and the complexity that characterises ecotourists. It has explored the relationship between tourism development and the natural environment over time revealing the negative environmental impacts of mass tourism that led to the emergence of ecotourism as an alternative form of sustainable tourism. After discussing the contested interpretation of ecotourism in theory and practice, it shifted the focus of the study to ecotourists, by highlighting the importance of segmenting the ecotourism market. The Spectrum of soft and hard ecotourist was introduced as the Spectrum that will be tested in this research once value dimensions have been incorporated. In addition, the study proposed that MDWs are an ecotourism activity which can be used as the context for this study. Finally research questions guiding this research were presented. The next chapter explains and justifies the research methodology adopted in this study.

3. Chapter 3 Method

3.1 Chapter objective

The main purpose of this chapter is to justify how and why mixed method through the use of Q method was chosen for this study. This chapter begins by reiterating the research problem and aims of this study in Section 3.2, while introducing Tasmania's Overland Track as the specific MDW that will be the setting for this study. Then it identifies and justifies the research framework in Section 3.3. Section 3.4 theoretically examines Q method, followed by Section 3.5 which looks at the practical four steps of implementing the method. Section 3.6 examines ethical issues in this study, and the potential for the generalisability of the study is discussed in Section 3.7. This chapter finishes with limitations of the study in Section 3.8, and leads to the following results chapter.

3.2 Research Aim

3.2.1 Research Problem

The study looks at the extent to which the inclusion of values in Weaver and Lawton's Ecotourist Spectrum affects its ability to segment Ecotourists in a MDW context. In an exploration of who an ecotourist is, Weaver and Lawton (2001) found that ten dimensions distinguish hard ecotourists from soft although they were not largely supported by other empirical studies. Empirical studies only partially agree with the criteria distinguishing hard from soft ecotourists or do not even discuss them. One of the key problems with this Spectrum is its use of behaviour based market segmentation, which is criticised for a lack of generalizability (Juric et al., 2002). Other empirical studies suggest values can also segment the ecotourism market. The research opportunity exists to integrate value dimensions to the behaviour based Spectrum. Hence, this study aims to add values to the Spectrum to segment ecotourists. Since values are considered to be more generalisable than demographic or behaviour based dimensions, findings of this study could improve theoretical understandings of soft and hard ecotourists, which seem to vary from study to study.

This study has also revealed a lack of understanding of the distribution of hard and soft ecotourists in MDWs due to the lack of academic research on MDWs. The management authorities of MDWs increasingly move towards offering better services and facilities in order to attract walkers from other competitive walking tracks. As MDWs are thought to be

hard ecotourism activities, the management authority should be informed about the ratio of hard and soft ecotourists in MDWs for future management.

3.2.2 Research Question

The research question is:

To what extent does the inclusion of values in Weaver and Lawton's Ecotourist Spectrum affect its ability to segment Ecotourists on a multi-day walk?

By incorporating value dimensions into the Spectrum, and using the augmented Spectrum to segment Overland Track walkers, the study explores the ability of value dimensions to distinguish ecotourists. Given studies of ecotourism are heavily investigated from a supply side, studies from the demand perspective add more knowledge to ecotourism literature (Sharpley, 2006, Perkins & Brown, 2012).

3.2.3 Overland Track as an example of multi-day walks

The Overland Track stretches for 65 kilometres in the Cradle Mountain-Lake St Clare National Park, a part of the Tasmanian Wilderness World Heritage, Australia (Parks and Wildlife Service, 2014b). On average, walkers spend five to six days to finish the track. It has been recognised as the most popular MDW in Tasmania since the 1930's (Sawyer, 2002), and it holds not only a national but also an international reputation for one of best MDWs in the wilderness (Cook & Harrison, 2002, Parks and Wildlife Service, 2014b).

The area of the Overland Track was originally occupied by Aboriginal people, and has been explored for resources and exploited by miners, snares, trappers and hunters (Byers, 1996). A recreational use of the area started in the 1900's (Parks and Wildlife Service, 2006), although prior to the Second World War, the Overland Track was largely unmarked, and most walkers hired guides for their safety (Byers, 1996). In 1982, major national parks of southwestern Tasmania were declared as world heritage areas, which later prompted the name change to the Tasmanian Wilderness World Heritage Area in 1989 (Parks and Wildlife Service, 2006). The world heritage listing raised the popularity of the Park both nationally and internationally (Moore, 2013), and also made mining, hunting, and snaring illegal, leaving recreation use as the main use of the area (Parks and Wildlife Service, 2006). This brought a new era in management of the Overland Track, when major huts and tracks were upgraded by a major Federal funding initiative (Parks and Wildlife Service, 2006). Today, most walkers choose to

walk independently by navigating themselves since the track is well marked and publicly available facilities such as board walks, huts and tent platforms help reduce the difficulty of the walk.

In the 1980's, a commercial guided tour company, Cradle Huts proposed construction of private huts along the Overland Track, while several companies had already been operating guided walks using tents and public huts (Moore, 2013). Cradle Huts built five huts by 1995 (Hamilton, 2006) with strict environmental conditions and restrictions on the use of helicopters for supplying the huts and removing waste (Moore, 2013). In addition, Cradle Huts employed environmental principles such as identifying sites for environmental appropriateness and autonomy of services by providing plastic water tanks and pipes for an autonomous water supply system (Hamilton, 2006). Today, five huts owned by Cradle Huts (currently renamed as the Tasmanian Walking Company) are hidden from the main track, and are equipped with hot showers, and three course meals are provided to customers who can stay in twin bedrooms (Tasmanian Walking Company, 2016).

Over the last 43 years between 1971/2 and 2014/15, the number of Overland Track walkers has increased dramatically from approximately 1,400 people to 8,000 people (Parks and Wildlife Service, 2016). In order to reduce environmental pressure from the increasing number of walkers but also to provide better visitor experiences by minimising crowding, the Parks and Wildlife Service introduced a management system in 2005 in three ways; by introducing a booking system to limit the number of walkers, and a track fee and making the track one way from North to South during the high season (1 October to 31 May) (Parks and Wildlife Service, 2008).

Currently the Overland Track is managed based on walker fees with the aim to cover the cost in relation to operational costs and maintenance (Parks and Wildlife Service, 2008). In 2005/06, the total revenue (96% from walker fees) was $459,372 and it adequately covered the expenses of $430,672. As the number of the walkers significantly increased, the maintenance cost and frequency of maintenance such as on the track, camping sites, and huts were expected to increase. In the 2007/08 season, the balance between revenue and expenses were negative, due to the construction of a new hut. As a result, the walker fee was increased from $100 to $150 to ensure adequate revenue to cover the expense of management (Parks and Wildlife Service, 2008), and was further raised to $200 (Parks and Wildlife Service, 2017).

The reputation of the track, publicly available facilities, and an option of guided walking bring a wide range of walkers from experienced local individual walkers to novice international walkers on guided tours. This range of participants will allow the spectrum of ecotourists to be examined in the field. In addition, while a tension between local and international walkers as well as guided walkers and independent walkers might exist, there is a lack of research in this area. Acquiring knowledge in this matter provides important implications for future management of the track. The study aims to provide an overview of existing segments of walkers of the Overland Track. It will reveal their values, travel characteristics, and different levels of acceptance of facilities.

3.3 Research Framework

3.3.1 Exploratory design

Exploratory studies are used when relatively little knowledge is available about the subject matter (Singleton & Straits, 2010). They are used to understand the nature of the problem since a lack of research on the subject matter renders the problem unclear. When researchers reveal some patterns of a phenomena of interest, theories and hypotheses can be developed. Even if some facts are known, an exploratory approach is effective to gain more information for developing a variable theoretical framework. In short, exploratory studies are useful in understanding relatively unknown study areas, but also in advancing knowledge through subsequent theory building and hypothesis testing (Sekaran, 2003). The aim of this study was to explore and improve the Spectrum by integrating value dimensions and testing the modified spectrum on Overland Track walkers.

One of the challenges researchers with exploratory studies face is insufficient guidelines to follow including who should be interviewed and which instrument should be employed due to a lack of clear dependent or independent variables (Singleton & Straits, 2010). It is also noted that difficulties lie in the lack of the ability to anticipate the effect of chosen instruments and participants on the direction of the study (Singleton & Straits, 2010).

Considering these as weaknesses of exploratory studies, it is also true that such weaknesses can be regarded positively as flexibility or freedom of choice. Singleton and Straits (2010) state that exploratory research is more open than other kinds of research. In fact, due to lack of consistent methodology from previous studies of ecotourism market segmentation, the flexibility in decisions of instruments and participants actually supports the suitability of exploratory design in this study (Bryman & Bell, 2007).

3.3.2 Ontology

Ontology questions what one can believe as the nature of reality and concerns whether there is a confined social reality and how it should be made (Ritchie & Lewis, 2003). This study adopted the approach of constructivism, which understands that knowledge about reality is socially constructed. It understands that what is regarded as a 'reality' is only meaningful within a particular value framework, while no worldview is determined by empirical or sense data about the world (Patton, 2002). Bryman & Bell (2007) describe that social phenomena and their meanings are continually being accomplished by social actors. Constructivism considers organisation and culture as pre-existing their objects of interest, but the emphasis is on the active role of individuals in the construction of social reality (Bryman & Bell, 2007). Approaching a study with constructivism in mind tends to follow a qualitative approach which acknowledges the fact that different stakeholders have different experiences and needs. Different experiences and perceptions of individuals equally provide value to the research. Thus the difference of stakeholders can be detected, although constructivism studies do not prioritise a particular perception of stakeholders as more real or meaningful (Patton, 2002).

Q methodology employed in this study is used to detect patterns of perceptions. Although each individual is treated equally to provide their perceptions, data analysis intends to find patterns of perceptions that are a cluster of opinions. For this, despite the appreciation of individuals' voices, the focus is on the commonly held views (See Section 3.4.2).

3.3.3 Epistemology

Epistemology focuses on what is considered as acceptable knowledge in a discipline (Bryman & Bell, 2007). From two main categories of epistemology stances common in social science, positivist and interpretivist (Goodson & Phillimore, 2004), this study adopts an interpretivist position. Positivism adopts the natural scientific way of understanding which views human behaviour as being governed by regularities so that research can be carried out independently and objectively (Snape & Spencer, 2003). On the other hand, interpretivism views the social world as not governed by regularities, but perceived and experienced only by its member who is inside (Blaikie, 1993). It understands that social actions are meaningful to actors, and therefore the focus needs to be given to their perspective (Bryman & Bell, 2007). The primary purpose of interpretivism is to let the data do the talking (Jordan & Gibson 2004), that is to provide a naturalistic voice to the phenomena (Tribe, 2006). Researchers adopting interpretivism attempt to gain access to what people think as common sense by focusing on individuals and to interpret their actions and the social world from their perspectives (Bryman

& Bell, 2007). Social actors constantly use and modify common sense as they interact with each other (Blaikie, 1993). Yet, the research cannot be purely objective or value free as the process of being studied affects people in the social world, therefore the researcher functions as a mediator (Punch, 2005).

In the process of segmenting the Overland Track walkers according to similar features including values, this study was interested in why each group holds common characteristics by understanding their point of view. By integrating with constructivism, the study was interested in revealing the voices of individuals that are grouped as patterns of perceptions. This is explained further in the next Section 3.4.

It is highly dependent on what the participants provide, and such expected findings are believed to be unknown. This is correlated with characteristics of interpretivism, in which researchers using an interpretive approach often encounter surprising findings (Bryman & Bell, 2007).

3.4 Q method

Q method was adopted in this study firstly since it is suited to an exploratory approach (Stephenson, 1953, Watts & Stenner, 2005, Griffiths & Sharpley, 2012). Q method is interested in understanding what is meaningful to people, and how they make sense and meaning of their realities (Stergiou & Airey, 2010). This matches with the aim of this study which attempts to understand the way to distinguish ecotourists in the Spectrum by understanding their values and travel characteristics. The subjectivity of multi-day walkers in terms of values and travel characteristics was the focus of the study.

3.4.1 Background

Developed by a physicist and a psychologist, William Stephenson in 1935 in the UK, Q method was applied and codified in North America especially in the field of psychology (Brown, 1980, McKeown & Thomas, 1988). According to Brown (1997), communication, political science and philosophy of science have been dominant fields employing Q method, while recently researchers in the behavioural and health sciences have also increasingly started to apply Q method. Although it had been relatively little known in social science (Barry & Proops, 1999, Stergiou & Airey, 2010), there is a tendency towards employing Q method among social scientists (Brown, 1993) such as in the field of marketing (Hindman, Mattern & Iszler, 2004), public policy (Zografos, 2007), rural research (Pini, Haslam-

McKenzie & Previte, 2007) and tourism (Davis, 2003, Dewar, Li & Davis, 2007). While it has scarcely appeared in tourism research (Stergiou & Airey, 2010, Phi, Dredge & Whitford, 2014), recent tourism researchers have started to employ Q method (Ekinci & Riley, 2001, Fairweather & Swaffield, 2001, 2002, Dewar et al., 2007, Hunter, 2011, Griffiths & Sharpley, 2012, Hunter, 2012, Cairns, Sallu & Goodman, 2014, Hunter, 2014, Phi et al., 2014, Hardy & Pearson, 2015).

The recent increase in adoption of Q methodology seems to stem from improvement of the software that reduces obstacles of quantitative analysis (Brown, 1996). Q methodology combines qualitative and quantitative approaches (Brown, 1996, Fairweather & Rinne, 2012, Griffiths & Sharpley, 2012), although due to the involvement of statistical data analysis, Q methodology was initially considered to be quantitative analysis (Brown, 1996). Yet, it is suited for researchers interested in qualitative aspects of human behaviour (Brown, 1993), as Q method is a way to reveal subjectivity such as perceptions, attitudes, perspectives, and experiences (Brown, 1996). While statistical analysis presented obstacles to many qualitative researchers, the virtue of software transformed the tedious calculations (Brown, 1996). In a movement toward qualitative approach in tourism, Q method is one appealing approach that contains qualitative aspects while maintaining sight of quantitative techniques (Eden et al., 2005). After an intense review of Q method, Stergiou and Airey (2010) also conclude that Q method can enhance the nature and richness of the methodological alternatives for developing tourism knowledge. They particularly raise this point based on one of the characteristics of Q method, subjectivity.

3.4.2 Study of subjectivity

Q method is understood as a scientific study of subjectivity (McKeown & Thomas, 1988, Robbins & Krueger, 2000). Subjectivity in Q method refers to a person's communication of an individual's perspective and is understood as operating within the internal frame of individuals (Stergiou & Airey, 2010). Dryzek (1990) also explains that it represents an individual's construction of a particular reality, which Eden et al. (2005) extend by adding it is various and contextualised in the moment instead of fixed, static or determined by socio-demographic or other characteristics of individuals.

It understands that subjectivity has a measurable internal structure, which is observable as an expression of one's behaviour (Robbins & Krueger, 2000). Subjectivity is "always self-referent and can be demonstrated to have structure and form'" (Brown, 1986, cited by

McKeown & Thomas 2013 p. 3). Self-reference is understood as "an internal frame of reference" (McKeown & Thomas, 2013 p. 2) about anything the person expresses their view on. Such expression is obvious when individuals reply 'in my opinion…', 'it seems to me…..' 'I agree/disagree….' (McKeown & Thomas, 2013).

Q method looks at subjectivity to identify distinctive dimensions and characteristics of individuals who share common perspectives (Fairweather & Swaffield, 2001, Lai et al., 2007). While qualitative research in general seeks to generate rich, nuanced and detailed data by revealing various individual's views (Mason, 2002), the focus of Q method is to identify shared views, not the distribution of views (Eden et al., 2005, Dewar et al., 2007) or individual perspectives (Barry & Proops, 1999).

For this, Q method is suited for contested topics such as sustainability (Barry & Proops, 1999, Eden et al., 2005, Boonitt & Pongpanarat, 2011). It is a way of revealing a limited number of patterns shared across individuals and the diversity of accounts in a structured and interpretable manner (Barry & Proops, 1999). By revealing limited shared views, it can bring coherent insights to research questions that have many socially contested answers (Stainton Rogers, 1995). By reflecting public opinions, Q method has practical implications for policy makers (Doody, Kearney, Barry, Moles & O'Regan, 2009). The revealed opinions can be a tool to communicate with the public (Macnaghten & Jacobs, 1997). This study assumed that the Overland Track attracts a wide range of ecotourists including those who might sit in the softer spectrum of ecotourists, given the national and international reputation of the track. By classifying the walkers into groups based on the modified spectrum, this research seeks to provide effective insight into future management of MDWs.

Moreover, one of the key characteristics of Q method is to cluster 'people' instead of variables. Factor analysis used in Q method is by-person correlation, and factors are groups of people for a set of variables (Griffiths & Sharpley, 2012). This means that Q method can segment the Overland Track walkers based on the modified spectrum as a whole, instead of each dimension of the model. This can test applicability of the modified spectrum in a MDW context. To illustrate, if the resulting groups of people contained only either soft or hard dimensions, that supports the original and modified spectrum, while a mix of dimensions in all groups would question the utility of applying the Spectrum in a MDW context.

3.4.3 Mixed method

As discussed Q method is an example of mixed method. Mixed method occurs when researchers cannot rely on a quantitative or qualitative method alone as information needed is not accessible from one method. While qualitative methods allow deeper understandings of values and perspectives of participants, a quantitative approach can gain a large size of responses by studying a sample of that population (Bryman & Bell, 2007). A use of multiple methods is less vulnerable to issues associated with the particular method than a single method as it ensures cross-checking from different types of data (Patton, 2002). It also allows researchers to realise different levels of reality (Bryman & Bell, 2007). A use of multiple methods is not for demonstrating the consistencies among the results, but for testing for the consistencies. Such inconsistencies derived from different kinds of data provide an opportunity for deeper understanding of the phenomena (Patton, 2002).

Q method combines Q sorting with interviews. Q sorting is the quantitative operation in which participants rank order a set of statements (Brown, 1993), and the rankings of statements are subjected to factor analysis, with the resulting factors indicating segments of subjectivity. Therefore it can be modelled by a respondent who systematically rank orders a purposefully sampled set of statements (Robbins & Krueger, 2000). Then Q method is also often followed by interviews to verify the accuracy of the interpretation of factors. Stergiou and Airey (2010) state that the Q soring process demonstrates the skeleton of subjectivity which needs to be interpreted through the voices of participants. Interviews can improve validity of Q method as they can reveal the relationship and inconsistencies in the Q sort (Stergiou & Airey, 2010). In short, Q method which involves interviews can qualitatively interpret participant's perspectives while quantitatively analysing it (Gallagher & Porock, 2010). Fairweather and Rinne (2012) also say that quantitative aspects are largely seen in establishing factors, while qualitative aspects are seen in understanding the factors.

One of main negative aspects of mixed method is time frame and budget (Patton, 2002). Employing multiple methods can be time consuming and costly as collecting more data requires more planning and preparation (Patton, 2002). In fact, Q method generally requires time particularly in the planning and analysis process (Eden et al., 2005). For instance, it can be time consuming to develop statements which covers the variety of the topic, to conduct factor analysis and qualitative analysis of the interviews (Barry and Proops, 1999). This research has gained limited but proper financial support to collect data, while time issues were addressed with careful planning and preparation.

3.5 Process of Q method

Q method comprises of stages (Barry & Proops, 1999, Robbins & Krueger, 2000, Eden et al., 2005, Stergiou & Airey, 2010, Cairns et al., 2014). Following the steps described by Stergiou and Airey (2010) and Eden et al. (2005), four stages undertaken in this study are summarised as follows.

1. Generate the concourse.

   This required identifying as wide a variety of opinions as possible about ten dimensions of the Spectrum and also exploring any value dimensions that differentiate walkers. Intensive preliminary interviews (Phase One interviews) were conducted.

2. Select a set of statements.

   Based on Phase One interviews, this required extracting statements that represent 10 dimensions of the Spectrum and emerging value dimensions into three levels, soft, medium and hard.

3. Perform Q sort.

   This involved Phase Two interviews asking respondents to sort statements developed in stage one a distribution scale from the most applicable to the least applicable, and the sorted distributions were recorded. The respondents were also asked to elaborate on their choices and preferences for the statements.

4. Process Q sorts

   This involved mathematical and interpretive analyses of the Phase Two interviews.

3.5.1 Stage One: Generation of the concourse

3.5.1.1 The idea of concourse

Q method starts with a preliminary study to identify as wide a variety of opinions as possible about the topic under investigation, that is development of a concourse (Barry & Proops, 1999, Robbins & Krueger, 2000, Eden et al., 2005, Stergiou & Airey, 2010). The concourse is a technical term used in Q method which describes a contextual structure of all the possible perspectives that respondents might make about the research topic (Stephenson, 1993). McKeown & Thomas (2013) cite Stephenson (1978, p. 22) that the concourse can be summarised as ‘our mind’ which contains views, feelings, emotions, beliefs, dreams and

wishes. Ideally the concourse is a statistical population of all possible discourses regarding the research topic, with a practically unlimited number of statements (McKeown, 1990). However, in practice the concourse merely is representative and comprehensive (Eden et al., 2005). The concourse is a researcher-generated theoretical representation of the range of potential subjectivities (Hunter 2012).

In this study, the concourse was generated from the literature review which identified dimensions that differentiate ecotourists from soft to hard. The concourse was defined as "*motivations, values and travel characteristics of the Overland Track walkers*".

The concourse was investigated via statements, as statements have been dominantly used in Q method (e.g. Ekinci & Riley, 2001, Griffiths & Sharpley, 2012, Hunter, 2012, Cairns et al., 2014, Phi et al., 2014). While use of photographs in Q study has recently gained in popularity, it was considered that some of dimensions in the Spectrum such as environmental commitment cannot be visualised, and can only be clearly identified by use of statements.

3.5.1.2 Development of concourse (Phase One Interviews)

The use of interviews is the most consistent means to identify a concourse, while secondary data such as literature or other sources that provide information about the topic can also be used (Ellingsen, Storksen & Stephens, 2010, Stergiou & Airey, 2010). Interviews can reveal the voices of the respondents rather than that of the researchers (Barry & Proops, 1999), and allows researchers to follow up questions immediately (McKeown & Thomas, 2013). Moreover, it can collect statements specific about the research objectives in a geographical context (McKeown & Thomas, 2013).

Although development of the concourse is a crucial stage that builds the fundamental theoretical baseline of the study, most studies employing Q method in the tourism field seem to quickly pass this stage by using only secondary data such as Hunter (2012). Some studies do not even specify how exactly the concourse was generated, such as Griffiths and Sharpley (2012) implying the lack of importance of discussing this process. Even when interviews were undertaken, they were often small in number, such as 20 structured interviews (Phi et al., 2014). Although Ellingsen et al. (2010) advise that only a few interviews may be sufficient to identify a concourse, justification of the small number of participants over a larger one is not given.

This study conducted intensive interviews in the development of a concourse to gain a wider picture of Overland Track walkers. The main purpose of the Phase One interview was to identify the spectrum of ecotourists based on ten dimensions described in the Spectrum and to explore any value related dimensions that seem to differentiate the Overland Track walkers. Thus, the involvement of a larger number of participants was important to improve the chance to find common or key value related issues discussed by the walkers. In addition to the interview, academic literature on factors differentiating soft and hard ecotourists was also used to form the concourse.

Interviews were conducted for over one month from 25th September and 22nd October 2014 in Hobart regions, and then the location was shifted to Lake St Clair National Park over seven days from 26th October to 1st November 2014. While three phone interviews were also conducted to reach participants who were in remote locations, the rest of interviews were carried out face to face.

Location

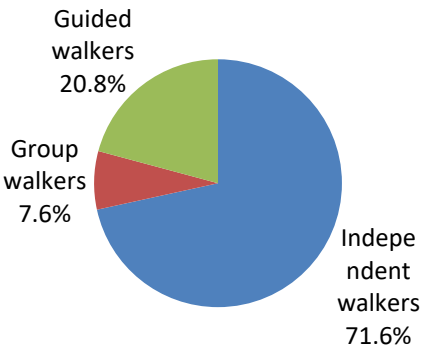
Firstly interviews were conducted in various locations in Hobart such as at the university, work places, private houses and cafes for the convenience of respondents. Later, the location was moved to the Lake St Clair National Park Visitor Centre, which is located at the southern end of Cradle Mountain-Lake St Clair National Park, within the Tasmanian Wilderness World Heritage Area, 180 kilometres west of Hobart. Since the Overland Track is a one way track from north to south during the booking season (October to May), the Lake St Clair National Park Visitor Centre is the final stop where walkers have to sign out in a logbook as a safety requirement. Having a general store, restaurant and toilets, the Visitor Centre was the ideal place to approach and interview walkers.

Due to the beginning of data collection being in the off peak season, the number of actual walkers on the track was expected to be significantly low. While the Overland Track received 7598 walkers in 2014/15 (Parks and Wildlife Service, 2015), the number of walkers is seasonal and highly concentrated during summer season, such as December to March of 2006/2007 received 95% of all walkers of the Track (Parks and Wildlife Service, 2008). To illustrate, according to PWS, in 2013 there were only 16 Overland Track walkers in August. Therefore, the interviews were first conducted in Hobart regions, targeting local walkers who have walked the track recently and as the time approached the start of the booking season, October, the location was moved to the Visitor Centre.

Samples

Target population

Figure 1: Percentage of type of Overland Track walkers in year ending June 2015 (Parks and Wildlife Service, 2016)



The target population was walkers who have completed the Overland Track in the last three years (2011 to 2014). The timeframe of three years was added to minimise the variance of walkers experience with the level of facilities as they had been regularly upgraded. Anyone aged 18 and over were targeted. The study involved a wide variety of walkers such as nationality, age, gender, and walking experience, as statements should be selected from the widest range of possibilities or situations, in order to reveal the limited number of shared views (Fairweather & Swaffield, 2001). It was especially aimed to balance the number of local, interstate and international walkers evenly as place of origin can greatly affect their values, views towards management of the park, geographic knowledge and planning.

While the PWS recognises three types of walkers on the Overland Track; independent walkers, group walkers and guided walkers (Parks and Wildlife Service, 2014a), the study aimed to approach all in order to gain a wide range of opinions. According to Parks and Wildlife Service (2014a), independent walkers are those who have access to huts, camping platforms and other facilities with the maximum group size of 8 people. Larger group such as community, commercial and school groups are called 'group walkers' who have access to the same facilities as independent walkers but use camping platforms instead of huts. Guided walkers are escorted by a commercial company called Tasmanian Walking Company who owns private huts (Parks and Wildlife Service, 2014a). However, due to the majority of Overland Track walkers being independent walkers (71.6 %), there was a great difficulty in approaching guided walkers and group walkers. In order to reveal opinions of guided walkers, guides who previously worked or were currently working for Tasmanian Walking Company were also interviewed to include the voices of guided walkers.

The target number of samples

The study aimed to interview 60 participants as Q method typically involves 40 to 60 participants (Stainton Rogers, 1995). Development of the concourse is time consuming due to the need for identifying the variety of responses stakeholders have (Barry & Proops, 1999).

Q researchers often restrict the number of interviews to avoid this complexity, however, 60 interviews were carried out in this study to deeply explore the perceptions of the walkers.

Sampling techniques

The study used non-probability sampling, specifically, convenience sampling and snowball sampling (snowball sampling was only used among local participants). A convenience sampling selects participants based on their availability to easily gain a large sample at a low cost (Saunders, Lewis & Thornhill, 2003, Tharenou, Donohue & Cooper, 2007). In snowball sampling, the researcher asks people who are relevant to the research topic to introduce others who are also linked to the research topic (Bryman & Bell, 2007). They are commonly used in the field of management, as researchers can avoid issues of probability sampling such as time consuming preparation and costs (Bryman & Bell, 2007). Limitations of these sampling techniques lie in the lack of generalizability due to the lack of knowledge of whether the sample is representative. Yet, it can present a link with existing findings and also with future research (Bryman & Bell, 2007). In addition, Stergiou & Airey (2010) believe that in general Q researchers select participants purposefully and theoretically in order to express distinct and clear views related to research topic. Who they are is more important than the number of participants (Stergiou & Airey, 2010). The choice of these sampling techniques was directly related to the subject of the study, as Bryman and Bell (2007) say, it is acceptable when the opportunity to collect data represents the only chance to research the sample. Although there is a chance of selecting particular people and a biased sample, limited resources dictated use of a convenience sample and snowball sampling (Ghauri & Gronhaug, 2005).

Figure 2: A photo used to promote participants

Participants were recruited via social media, particularly Facebook. The use of Facebook to recruit participants for research studies is convenient and inexpensive, and can achieve wider and rapid responses (Kapp, Peters & Oliver, 2013). A free-post was created using the following photo in the wall page of Hobart based bushwalking clubs including Tasmanian University Bushwalking Club (784 members), Hobart Walking Club (462 members) and Pandani Bushwalking Club (310 members) in September 2014. Then participants contacted the researcher to arrange appropriate times and locations for interviews.

The interviewed participants also introduced the researcher to their friends who had recently walked the track. Participants who lived in remote areas of Tasmania or mainland were interviewed by telephone.

In order to reach interstate and international walkers, the same post was put on Facebook pages of bushwalking clubs in mainland Australia, including Walking SA, Bushwalking Victoria, Brisbane Bushwalking, and Sydney Bushwalking Group. However, there were no responses from these groups. Therefore the decision was taken to relocate the interview site to the Lake St Clair National Park Visitor Centre in an attempt to interview a broader range of walkers. The researcher informed walkers in front of the Visitor Centre after completing their walk. A poster positioned in the Visitor Centre also informed walkers of the research but only those willing to participate and who approached the researcher were interviewed.

Instrument

The interviews contained two parts. The first part was structured with open-end questions regarding the motivation, values and travel patterns of Overland Track walkers. Since Q method contains abductive analysis, which generates hypotheses based on available data, any data related to participants can be useful. Exploring reasoning behind their choice of the Overland Track or their comments about the experience were thought to broaden the voices of walkers that might not have been explored.

The questions were fundamentally based on ten dimensions of the soft and hard ecotourism Spectrum. The questions were developed to allow a broad range of responses by asking ‘what do you think about each dimension of the Spectrum’. In addition, motivation for walking the Overland Track, and the reason for choosing the particular time of year were also asked. In this part, participants were encouraged to bring any thoughts related to the questions, in order to extract ‘statements’ that express their points of view and most importantly their values. For this, participants were asked to raise any comments about their experience of the Overland Track, such as their motivations to walk the track, their evaluation of the track, any issues encountered during the walk. It was considered that by letting walkers talk about their experience of the walk, value related statements would emerge throughout the interviews. Phase Two of the research could only use statements that were derived from interviews with Overland Track walkers. Thus the wording of the statements was dependent on what interviewees reported about their views and experiences of the track in relation to the ten dimensions of the Spectrum. Thus statements could not simply replicate statements used in previous studies.

Part two contained closed questions about socio-demographic information. Interview schedule of Phase One interviews including Part one and two is given in Appendix A. Interviews were recorded by a voice recorder so the interview could proceed naturally. On average, the interviews took 20 to 30 minutes per participant.

3.5.2 Stage Two: Selection of a set of statements

In the stage of selecting the items of the concourse, researchers need to reduce the number of statements into a final set of statements (Eden et al., 2005). The final Q sample should represent all the major ideas, views, feelings and opinions gathered on the topic (Stergiou & Airey, 2010). The comprehensiveness of a Q set to describe different dimensions of the research topic is key to collecting a wide range of relevant views on the subject (Stergiou & Airey, 2010). Q researchers use matrices developed from best available knowledge to select statements across the typology, although how to classify a statement on this matrix remains a judgement for the researcher (Eden et al., 2005).

This study used the soft and hard ecotourist Spectrum which identifies ten dimensions (Weaver and Lawton, 2001) as the key matrix to identify statements **(**Table 4**).** After manually transcribing 60 recorded interviews, key statements related to ten criteria of the hard and soft spectrum were highlighted on a basis of each interview. Then key statements for each dimension were gathered and further classified into hard, medium and soft categories. The study attempted to find suitable statements that fall into such distinctions. Statements at the medium level were adjusted from responses of these interviewees that lay between the two distinctive ends. The detailed process of determining the final of set of statements is presented in Chapter 4.

Table 4: The ten dimensions and characteristics of soft and hard ecotourists extracted from the Spectrum (source: Weaver and Lawton, 2001)

	Hard	**Soft**
Environmental commitment	Strong	Superficial
Purpose of the visit	Specialised trips	Multi-purpose trips
Length of the trip	Long	Short
Size of the group	Small	Large
Physically active	Active	Passive
Physical challenge	Challenge	Comfort
Expectation of facilities	Few if any facility expected	Facility expected
Degree of interaction with nature	Deep	Superficial
Way of interpretation	Emphasis on personal	Emphasis on interpretation

	experience	
Travel arrangement	Make own travel arrangement	More use of travel agents and tour operators

The final set of statements were further edited, reworded, shortened to ensure clarity and less ambiguity. According to McKeown and Thomas (2013), when selecting statements in Q method, ideally statements should be natural in the language of the parties to the concourse and should represent subjectivity and perspectives in a short format. Practically statements should remain faithful to the natural phrasing of the original communications representing the linguistic context of the discourse. However, editing can ensure that items do not project internal contradictions commonly referred to as double barrelled meanings (McKeown & Thomas, 2013). In addition, a pilot study revealed that participants who had just completed the Overland Track were physically tired and struggled to read and rank each statement in comparison to others. To facilitate this, statements were edited in order to ease the comparison of three statements in each dimension without changing the main part of the comparison. In addition, although long statements have been used successfully, they have the disadvantage of increasing the time required to complete the sorting (McKeown & Thomas, 2013). Thus statements were designed to be short and simple.

Prior to the Phase Two interviews, a brief questionnaire of 36 statements were pilot tested with the purpose of uncovering any problems (Ghauri & Gronhaug, 2005). A pilot study can refine problems in answering questions and recording data and assess the likely validity and reliability of the questions (Saunder, Lewis & Thornhill, 2012). Face to face interviews were conducted individually with four respondents who were all multi-day walkers including a mix of local, interstate and international people.

The pilot test revealed that the wording of the statements appeared to be unclear and one participant asked the researcher for clarification. Therefore wording was changed from “I am not overly opposed to introducing more comfortable facilities. I don’t think the level of facilities changes the whole experience” to “I am totally okay if the national park wants to introduce more comfortable facilities. I don’t think the level of facilities changes the whole experience”.

3.5.3 Stage Three: Performing Q sort (Phase Two Interviews)

In the third stage, Phase Two interviews were undertaken. The purpose of this stage was to ask participants to sort order the set of 36 statements developed in the second stage. It aimed to segment Overland Track walkers based on how they sort these statements which represent the spectrum of soft and hard ecotourists as well as value dimensions. None of the respondents interviewed in Phase One interviews were involved in Phase Two interviews.

Location

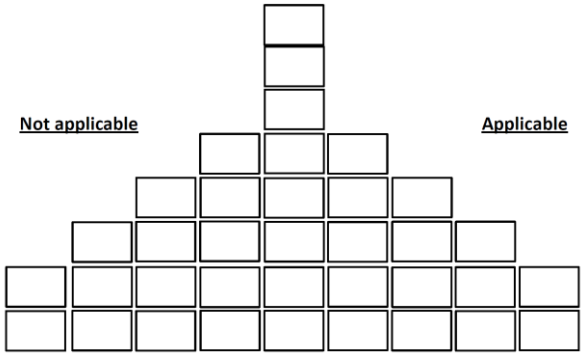
Similarly to some of the Phase One interviews, Phase Two interviews were conducted at the Lake St Clair Visitor Centre. As the Phase Two interviews got underway it was noticed that the range of walker types being interviewed was quite narrow. In particular young interstate walkers were over-represented. The interview location was transferred to the Pelion Hut on the Overland Track where 25 walkers participated in the interviews over six days from 1st of March to 6th March 2015. Pelion Hut is situated in the middle of the Overland Track, approximately 35 km distance from the start point, Ronny Creek, near Cradle Mountain (Parks and Wildlife Service, 2014c). The biggest hut on the Overland Track is typically used as an accommodation on the third day, accommodating 36 people (Parks and Wildlife Service, 2014c). The new location of Pelion Hut enabled the researcher to reach older, local and international walkers who were lacking from the previous cohort of respondents. The study had intended to use Pelion Hut from the outset of Phase Two but permission was needed from the Parks and Wildlife service which took time to be granted.

Samples

Respondents were recruited using non-probability sampling techniques, particularly a convenience sample. As explained previously in Section 3.5.1.2**,** the limited number of the walkers per day and limited time frame of the research led to the use of a convenience sample in this study. The study targeted independent walkers who were walking/had just completed the Overland Track in summer season (2014/2015). In this study, independent walkers meant individual walkers who planned and walked by themselves using huts and camping sites publicly available and those walking from north to south. Anyone aged under 18 and non-English speakers were excluded. Guided walkers who use both private huts and public huts were also excluded as they were on tighter time schedules which did not permit the time to complete Q sorting. In addition, difficulties of access to private huts prevented their inclusion. Walkers were informed about the study by posters displayed at the Visitor

Centre of the Lake St Clair National Park or the Pelion Hut on the Overland Track within the National Park. Only those willing to participate and who approached the researcher were interviewed.

Figure 3: 9 point scale used in statement sorting



This research aimed for a sample size of 40 to 60 as that is the typical number of participants of Q method (Stainton Rogers, 1995). In fact, 54 interviews were carried out. It ensured that the sample size did not exceed 60 as an inclusion of a large sample of participants should be avoided as it might uncover too many complexities and fine distinctions in data in Q method (Watts & Stenner, 2005); studies employing Q method often involve as small as 12 participants (Barry & Proops, 1999). In Q method, each participant makes a judgement about statements against others and the degree to which how strongly they like/dislike is also comparable between different participants (Barry & Proops, 1999). The richness of data makes it difficult to analyse a large data set (Fairweather & Swaffield, 2001).

Instrument

Participants were asked to sort order the set of 36 statements developed by Phase One Interviews (this operation is referred as Q sorting (Brown, 1993)). Participants produced a Q sort according to what they believed was the 'most applicable' to 'least applicable' to their experience of the Overland Track in a distribution of nine piles (Figure 3). While a range of scales are used in Q method, the differences in the distribution shape have no major effects on Q results (Brown, 1980). The range and the distribution of the Q sort table are arbitrary and depend on the number of statements in the Q samples (Stergiou & Airey, 2010). A nine point scale was chosen as it is recommended when the items of statements are smaller than 40 (Brown, 1980).

The participants were also interviewed to elaborate on their choices and preferences for the statements. Moreover, brief open ended questions about motivations for walking the Overland Track and MDWs in general as well as closed questions regarding socio demographic questions were asked. This information provides additional hints to understand

factors in the interpretive analysis (Watts & Stenner, 2012). In understanding why a particular statement is ranked where it is by each factor, the information functions as clues to generate hypotheses, in other words, supporting the quantitative analysis (Watts & Stenner, 2012). Interview schedule of Phase Two which includes a detailed instruction of sorting statement is given in Appendix B.

Each statement was numbered, and participants were asked to refer to the number when explaining the reasons for their particular positions. The researcher recorded the position of statements in the distribution scale. The whole interviews were recorded via a voice recorder. The interviews took 45 minutes to 60 minutes on average per participant.

3.5.4 Stage Four: Processing Q sorts

In Q method, the aim of researchers is to identify the subjective viewpoints represented by factors. Factors are established by statistical analysis, while qualitative analysis follows to understand the factors (Fairweather & Rinne, 2012). The statistical analysis consists of correlation, factor analysis and computation of factor scores (Stergiou & Airey, 2010). The first task of data analysis was to convert Q sort into factors (Watts & Stenner, 2012). The resulting ranking of the statements (called individual's "Q sort") (Barry & Proops, 1999, Danielson, 2009, Frantzi, Carter & Lovett, 2009) of a total of 54 participants were inter-correlated and factor-analysed using PQ Method software that is freely available online (Schmolck, 2014). The factor analysis process that underlies Q method involves a series of decisions, such as how many factors to extract, which factor analysis method to use, which rotation method to use (Thompson, 2004). The result of a Q method is dependent on researchers' decision on these matters (Eden et al., 2005). Each of these issues is addressed and presented with statistical analysis in Chapter 5.

Factor interpretation, which carefully and holistically inspects the patterns of items in the factor array (Stenner, Cooper & Skevington, 2003), aims to interpret the characteristics of each factor. The aim of factor interpretation is to discover, understand and analyse the perspective of the factor assuming that it is an ideal-typical human with consciousness (Watts & Stenner, 2012). The task is to produce an account which contains distinctive characteristics of each factor based on patterns of items contained in a factor array (Watts & Stenner, 2012). The order of items such as the statements in the array is fundamental to understand the uniqueness of the particular factor. PQ Method highlighted consensus and distinguishing statements factors. These summaries helped grasp the big picture of each factor. Then

researchers carefully analyse the position of particular items over the others, as well as overall layout of the items in the factor array (Watts & Stenner, 2005). In this study the top six and the last six items in each factor were given special attention. In addition, some attention was given to the next six, top and the last items in case of statement sorting, to further understand the key characteristics of the factors. Demographic data and interview comments of each loader in these factors were also used to deepen the analysis.

In Q method, factor interpretation should provide hypothetical or the best possible theoretical analysis of the factor array (Watts & Stenner, 2012). Therefore, the task of the researcher is to explain why each factor, considered as a hypothetical person, rated statements in that particular order. This process was assisted by combining demographic data and interview comments looking for clues that can assist the interpretation. The detailed qualitative analysis, factor interpretation, is presented in Chapter 5.

3.6 Ethical issues

Principles of ethics are divided into four; harm to participants, lack of informed consent, invasion of privacy, and deception (Bryman & Bell, 2007). Here expected ethical issues and related solutions are discussed based on the first three principles.

First, harm can be interpreted in a number of ways such as physical harm and psychological harm such as anxiety, stress, or embarrassment (Jennings, 2001, Bryman & Bell, 2007). Since the majority of participants in this study were walking/had just completed the Overland Track, they were physically and probably psychologically exhausted after their long walk. Therefore, the study ensured to reduce the burden on respondents in a number of ways. First, walkers were informed about the interviews in advance such as via Facebook or posters at the Visitor Centre, and only those who wanted to participate approached the researcher. In addition, since the length of interviews were relatively long, the structure of interviews was set effectively to maintain the concentration of participants. A simple design of interviews helps reduce the burden on respondents (Yamada & Ham, 2004).

Participants should be told enough information as possible to decide whether or not to participate in the study (Bryman & Bell, 2007). All participants were given a brief introduction to the research objectives to maintain the right to withdraw anytime (Jennings, 2001). Prior to the interviews, an information sheet (see Appendix C) was given to participants and the researcher emphasised the use of the voice recorder during the whole interview, estimated length of time and voluntary participation to ensure their right to

withdraw from the study. All the participants signed the consent form (see Appendix D) before the interview commenced.

In order to protect the privacy of participants, interviews should be designed to minimise private nor sensitive questions (Bryman & Bell, 2007). Interviews avoided asking occupation and income of participants, and the only socio-demographic question was age of participants. The age was grouped into five groups to cover exact age. In addition, all participants were identified with ID codes, and were otherwise not identified. Identities and records of participants were maintained confidentially and anonymously. In addition, it was also important to create a space for the respondents to feel comfortable to answer the questions. The interview was sometimes conducted in a public space where other walkers were around. For this reason, the participants were asked individually if the interview needed to be conducted in private space.

3.7 Generalisability

Generally speaking, generalisation refers to whether the findings of research can be applied beyond the research and to the larger population (Saunder et al., 2012). In quantitative studies generalisation is explicitly claimed based on scientific reasoning such as statistics and random samples, while in qualitative studies claims for generalisation is less explicit and some researchers even deny the possibility of generalisation (Payne & Williams, 2005). This study largely driven by a qualitative approach has limited chance to provide such generalisability. In a quest for whether interpretivism studies can produce generalisation, Williams (2000) by raising three possible meaning of generalisation, total generalisation, statistic generalisation and moderatum generalisation, argues that interpretivism provides moderatum generalisation, which is an intermediate type of limited generalisation (Williams, 2000, Payne & Williams, 2005). While total generalisation refers to an identical instance of a general law, statistical generalisation is understood as probability of phenomena occurring in the larger population (Fairweather & Rinne, 2012).

Fairweather and Rinne (2012) believe that Q method provides a basis for moderatum generalisation, that is defined as "where aspects of S can be seen to be instances of a broader recognisable set of feature*"* (Williams 2000, p. 215). Moderatum generalisation has moderate claims about the social world that are not meant to hold true over long periods of time or across cultures. They are moderately held and therefore open to change (Payne & Williams, 2005, Fairweather & Rinne, 2012). Such that moderatum generalisation includes hypothetical

characters which can be testable with further evidence to be confirmed or rejected (Payne & Williams, 2005). As pointed out, Williams (2000) acknowledges the limits of moderatum generalisation to be only moderate, meaning no statistical generalisation should be made. This means that the findings of this study cannot be generalised to a larger population of Overland Track walkers. In addition, the findings might not stay true for a long period of time, or applicable to other walking tracks in Tasmania. However, it provides hypothetical clues to understand Overland Track walkers, and it is a useful implication for national park authorities who manages wilderness multiday walkers.

While limits of generalisation in interpretive studies lie in sampling, which selects participants purposely, if it is acceptable to aim generalisation from interpretive studies as a legitimate goal, one of strategies in sampling is to reveal characters of the wider group to which researchers wish to generalise (Williams, 2000). A sampling technique that aims to reach a 'wider universe' through a range of units such as experiences, characteristics and categories is a way to achieve this (Williams, 2000). In fact, Gobo (2008) states that findings provided by Q method are reflexively generalisable even if probability sampling is used. This is because as supported by Hunter (2012, p. 337) "while individuals might update or revise their attitudes toward a discourse, the cluster of subjectivity will represent original and unique functional divisions within society". In addition, collecting data until it reaches saturation point, that is the point when no further interview would provide new information, is another strategy to make generalisation claims stronger (Williams, 2000).

Validity concerns whether the scale used measures what it intended to do (Bryman & Bell, 2007). Incorporation of accurate operational measures for the concepts under investigation, is essential strategy to increase the validity (Shenton, 2004). In Q methodology, this is ensured by theoretically defined concourses and exhaustively extracted Q statements (Hunter, 2012). This study used the Spectrum (Weaver & Lawton, 2001) as a theoretical base, while intensive interviews during Phase One of the project allowed case specific interpretation of the theoretical concourse in the form of statements. In addition, Ekinci & Riley (2001) witnessed face validity and content validity both from Q sort procedures. Face validity is established when people with experience or expertise in a field determine that the measure seems to reflect the concept (Bryman & Bell, 2007). Content validity is

> the extent to which one can generalize from a particular collection of items to all possible items in a broader domain of items, the intention is to obtain as representative a collection of item material and relevant content as possible (Nunnally & Berstein, 1994, p. 104).

These have been ensured in the process of developing statements from the Phase One interviews and sorting by the actual Overland Track walkers in Phase Two. Internal validity, 'how congruent are the findings with reality?' promotes confidence that they have accurately recorded the phenomena under scrutiny:

Reliability is quantitatively understood as whether the results can be replicated (Bryman & Bell, 2007). It concerns if the work can provide similar results again under the same context such as the same methods and the same participants (Shenton, 2004). Qualitatively speaking, however, the changing nature of the phenomena makes these tasks problematic (Shenton, 2004). As acknowledged in this section earlier, findings of Q method might not stay true for a long period of time due to the nature of moderatum generalisation. Thus qualitative researchers identify the reliability as dependability, and this can be addressed by reporting the processes within the study in detail, in order to allow researchers to repeat the study, not to achieve the same results (Shenton, 2004). In Q study, this has been ensured by the fit between sampling and framework (Echtner & Ritchie, 1991), the link between researcher and respondent and the additional observations, interviews and case-specific interpretation of results (McKeown & Thomas, 1988). This study has identified what was planned and implemented by providing the research framework in Section 3.3 and its implementation in Section 3.4. Operational detail of data gathering is minutely given for each of four steps involved in Q method in Section 3.5, to demonstrate what was done in the field.

The comparable concern to objectivity is confirmability in the mind of qualitative researchers. Strategies need to be undertaken to ensure that findings of the work present the experiences and perspectives of the participants, instead of that of researchers (Shenton, 2004). In order to achieve this, this study conducted the intensive preliminary interviews (Phase One interviews), instead of secondary data. Phase Two interviews also ensured that each participants provided their reasons for selecting each statement in the particular order. By combining these voices of participants with the statistical analysis, this study aimed to provide the voices of participants. As discussed later in Section 5.3.1., the researcher's

perspective came within the process of deciding the number of factors to extract. However, this is the nature of Q method, since there is no correct number of factors (Watts & Stenner, 2012), but the decision is driven by a variety of statistical analyses as well as theoretical considerations (McKeown & Thomas, 1988).

3.8 Limitations

Firstly since the focus of Q method is given to investigate why and how people believe what they do, this study has limitations in identifying the distribution of views across a population given in percentages and numbers (McKeown & Thomas, 1988). Therefore while the study can identify a limited number of shared views of Overland Track walkers based on their sorting patterns of statements, this study cannot present how many people believe each view. Yet, as discussed in Section 3.7, the study believes that Q method provides moderatum generalisation.

The study acknowledges the absence of guided walkers who comprise 20 % of the walkers on the Overland Track (Parks and Wildlife Service, 2016). Although Phase One interviews involved the voice of guided walkers by approaching guides and a few guided walkers, in Phase Two the study concentrated on free independent walkers by excluding guided walkers. Therefore, the study does not present a complete sample of ecotourists. However, guided walkers were not approachable during the peak season, due to nature of Q method which took one hour per participant to complete the interview. At the Visitor Centre, while individual walkers often had long hours before public transport pick up, guided walkers only had half an hour as the private shuttle bus was waiting for them as soon as they finished the walk. At the Pelion Hut, the public hut was only used by the guided walkers as a lunch stop, and the researcher voluntarily refrained from entering private huts for voluntary participation of the study. Results were not comparative to that of independent walkers which was collected twice during on and off seasons. Associated with limited time and budget constraints, the study could not extend to look at both independent and guided walkers. Future studies may provide more insights as guided walkers are assumed to lie at the softer end of the ecotourist spectrum and may have a lot to contribute to future research.

Similarly, the study also acknowledges the absence of off-peak walkers, who were considered to contain a large number of local walkers. While they were included in the Phase One interviews, the Phase Two interviews did not include them since the data was collected during the peak season. It is considered that local walkers who walk during the peak season

and off season might differ in their walk experience, since walking in off-peak requires more walking experience due to cold and unreliable weather as well as the absence of the track fee, booking, and the use of the two way track system. The study concentrated on walkers during peak season, as it is reported that 95% walkers walk during the peak season, and these are the people who generate economic contributions to the park. Further research that can include the voice of off-peak walkers might add a wider variety of travel characteristics of Overland Track walkers.

3.9 Chapter conclusion

This chapter has explored the research methodology guiding the exploration of the Weaver and Lawton's (2001) Spectrum within this thesis. A Q method was shown to be the appropriate strategy through which to explore the ecotourism spectrum as applied to Overland Track walkers given the exploratory nature of the research overall. This chapter also presented the four steps of Q method. Findings of Phase One interviews will be presented in Chapter 4, followed by findings of Phase Two interviews in Chapter 5.

4. Chapter 4 Results (Phase One Interviews)

4.1 Chapter objectives

The purpose of this study is to examine the ability of Weaver and Lawton's Spectrum to segment ecotourists on the Overland Track once value dimensions are incorporated into the Spectrum. The previous chapter has identified this study employed an intensive preliminary study to gain a wider picture of Overland Track walkers and to explore value related dimensions that seemed to differentiate the walkers. This chapter presents the results of the preliminary study (Phase One interviews). The purpose of this chapter is to show how 36 items were selected as statements to be sorted in the Phase Two interviews. The following Section, 4.2 briefly reviews the Phase One interviews and the demographic information of participants involved. Section 4.3 identifies the process of selecting the statements. Section 4.4 provides detailed explanation of how the 36 statements were drawing on intensive comparisons with the literature. This section looks at the patterns of responses of the walkers to the ten dimensions identified in the Spectrum, followed by the emerging value dimensions that diversified opinions of walkers.

4.2 Brief review of Phase One interviews

As described in Section 3.5.1.2, the purpose of Phase One interviews was to identify the spectrum of ecotourists based on ten dimensions described in 'the Spectrum' and to explore any value related dimensions that seem to differentiate the Overland Track walkers. The Phase One interviews involved people who had walked the Overland Track in the last three years (2011 to 2014). The participants were asked to describe who they are in relation to ten dimensions of the Spectrum. Taking one of the dimensions of the Spectrum, 'being physically active' as an example, the interviews asked a question: 'Tell me how physically active you were when you were doing the Overland Track'? The study was interested in how each participant interpreted the term 'physically active' and how they described their level of being 'physically active'. The participants were encouraged to bring any thoughts related to the questions, in order to extract 'statements' that express their points of views. Additional questions such as motivation for walking the Overland Track, any issues encountered during the walk were asked to detect controversial value related topics. Interviews were manually transcribed and key statements related to the ten criteria of the Spectrum were highlighted on the basis of each interview. Then key statements for each dimension were gathered and further classified into hard, medium and soft ecotourist categories. The study attempted to

find suitable statements that fall into such distinctions. Statements at the medium level were taken from responses of these interviewees that lay between the two distinctive ends.

4.2.1 Statistics of participants

The Phase One interviews were conducted with 22 local, 21 interstate and 17 international walkers. While the majority of them were individual walkers, seven were guided walkers (four guides and three guided walkers) and two were group walkers. While the majority of interviews were face to face, three phone interviews were conducted with people who were at a distance.

4.3 The process of selecting statements

One of the challenges to form statements based on the Spectrum was with unclearly defined dimensions such as "environmental commitment" "physical challenge" and "physically active". When the respondents identified these terms from their experience of the Overland Track, they interpreted the dimensions in a range of ways. To illustrate, "physical challenge" was described as those who enjoy walking fast or slowly, or those who complained that the board walk ruins the physical challenge of the walk in comparison to those who appreciated the board walk as it makes it easier and more comfortable to walk. This makes it difficult to determine which interpretation of the dimensions of physical challenge should form the final version of the statements. The decision was made based on whether the respondents raised three different levels of responses and if so, statements with extreme differences were used in order to promote positive or negative reactions from respondents. This approach is supported by McKeown and Thomas (2013) who believe that statements can be aggressive. Given the subjectively selected Q sample, positively valued statements from one group might be viewed negatively by the other respondents (McKeown and Thomas, 2013). Additionally, whether it stands out as a single dimension without involving other dimensions was another key factor in deciding the final statements. It is advised that statements should be clear and unambiguous as this makes interpreting the factor array in the data analysis process easier (Watts & Stenner, 2005).

4.4 The final set of 36 statements

The list of the finalised 36 statements are summarised in the following table (Table 5). The following section compares how each of the nine criteria were defined in Weaver and Lawton (2001) study with how participants in this study interpreted each dimension. It then justifies how and why particular statements were chosen to represent each criterion. It is important to

note that one more criterion of the Spectrum, length of stay, did not require development of statements since it was easier to ask participants the exact dates of their stay in Tasmania. The last three dimensions in the table, including 'freedom', 'access to facilities' and 'impact of facilities on the experience' have been added as value based dimensions. The process and the justification of why these dimensions are selected to represent value dimensions in this study are also examined.

Table 5: The list of finalised 36 statements developed from Phase One interviews

	Hard	**Medium**	**Soft**
Environmental commitment	I am pretty happy to pay the track fee. In my opinion, if you are using the track and facilities you should pay for it.	The price of this track is expensive, but on completion of the track it was clear that the fee was good value.	I found the price of this track outrageous to be honest. I felt I was being ripped off.
Purpose of visit	The purpose of this trip is just to do the Overland Track and/or other walking in Tasmania.	The purpose of this trip was mostly walking but I had another reason to come to Tasmania.	I enjoy Tasmania in general. Walking is just one of the things I am doing in this trip to Tasmania.
Size of the group	I like walking solo or with one other person. You can set your own time and pace and stop when you want.	Walking with 4 or 5 people is good, because a social bond develops naturally.	We want a group that is social and interesting. I enjoyed having 9 people in my group.
Physical active /passive	During the day, I wanted to get the most out of each day, not just walk the three hours hut to hut. So I did most of the side trips including to the top of mountains.	I did some side trips, and sometimes I just sat there and had tea.	No way, I don't do side trips they are too much hard work after I have exerted myself. What I've seen is beautiful enough.
Physical challenge/comfortable	I like to see how many mountains I can climb and how fast I can do it	I don't choose walks that are gonna challenge me. I don't walk harder than I want to.	I walk for rest and relaxation, so I just want somewhere with a really nice view. I enjoy having a break and walking at my pace.
Expectation of facilities (few/ comfortable)	On a multiday walk I don't expect facilities to be provided so what I found was beyond my needs.	On a multiday walk I do expect some facilities to be provided and what I found was appropriate	On a multiday walk I expect comfortable facilities to enhance my walking experience and these could have been better given the price I paid.
Degree of interaction with nature (deep/shallow)	The walk encourages you to think about our relationship with nature. I felt so connected to the natural environment.	From time to time I felt a bit in touch with nature because there was serenity, beauty and variability too.	I enjoyed looking at the visual things and just being out in the fresh air and being outside in the environment.

Interpretation (personal/guided)	I like to develop my own interpretation rather than someone else's.	I would definitely appreciate input from guides, but sometimes it's too much information. Then you don't have enough time to take it in by yourself.	I like being guided. Guides know and understand the country and they can create such a better, richer experience.
Travel arrangements	I did all the research, I booked the trip myself online. It is challenging to do it by myself. Part of the fun in camping for me is that 'oh yeah I packed everything correctly'.	I like helping to research and make the bookings, but I don't like to take all the decisions when arranging the trip.	I don't want to be responsible for any planning or preparation, which includes having to have the appropriate gear.
Freedom	I don't like to be guided. When I walk, I like to be independent, and I don't like to be structured.	I am not against walking with guides in general, but I wouldn't want a guide with me for 24 hours on the track.	I wanted to walk with guides because they look after you. Having people there to support you gives you confidence.
Access to facilities	I don't like the idea that someone else is better than you, like some can take a hot shower and others cannot. I think everyone should be equal.	I don't mind guided walkers having some luxury as long as the private huts are out of my sight. It adds another dynamic.	Providing meals and showers is great. You feel special to have such luxury when others cannot.
Impact of facilities on the experience	Having this level of facilities, it does seem to me to lessen the whole experience.	It would be great to have more comfortable facilities, but will this experience still be the same? So I would say the level of facilities is good the way it is.	I am totally okay if the national park wants to introduce more comfortable facilities. I don't think the level of facilities changes the whole experience of the walk.

4.4.1 Statements based on the Spectrum

Environmental commitment

As environmental commitment is often linked with financial obligation, the reaction towards the Overland Track walker fee was thought to play a key role in differentiating types of walkers. Weaver and Lawton (2001) defined strong environmental commitment based on positive attitudes towards participating in volunteer works, donating extra money to support ecotourism sites such as national parks, and pointing out a person with irresponsible environmental behaviour. Similarly, Blamey and Braithwaite (1997) looked at environmental

commitment through their obligation to purchase eco-friendly products and to donate to environmental groups.

In this study environmental commitment was identified as the level of willingness to pay the track fee. The willingness to pay is considered to be a function of attitude, which is influenced by behavioural experience (Fishbein & Ajzen, 2010). While a number of factors affect willingness to pay, membership of environmental organisations and attitude towards the environment have been found to be a strong predictor of willingness to pay (Carlsson & Johansson-Stenman, 2000, Reynisdottir, Song & Agrusa, 2008). Reynisdottir et al. (2008) suggest that those who are concerned about the environment have more understanding of the reasons for charging the fee or are willing to pay more for something they regard highly.

When respondents were asked, 'How did you find the price of the track fee?' the Phase One interviews revealed that two opposing views of the track fee. While the majority of walkers agreed with the need to pay the track fee, there was a group of people who did not understand why they had to pay the fee. In addition, among those who agreed with the fee, there were two types of responses. One was totally happy to pay the fee, while the other group confessed that initially they thought it was very expensive until they actually walked the track. The walkers were clearly categorised into three groups.

The purpose of trip

Weaver and Lawton (2001) identified the scope of a specialised trip based on a statement, "My ecotourism experiences are usually just one component of a multi-purpose trip experience". In this study, a simple question "What was the purpose of the trip? Was the Overland Track the only purpose of the trip" was used. As a result of the preliminary data analysis, specialised trip was identified as those travelling for the Overland Track and/or other walks in Tasmania. The most common comments from the respondents were "I just came here to do the Overland Track, fly in, walk and fly out". Some walkers also came to Tasmania to do other day walks as well as other multi-day walks. These two types of walkers still fall into the same category of hard ecotourists as the purpose of the trip was doing a multiday walk. Those who had other reasons to stay in Tasmania were either those traveling for another purpose such as day walks, MONA, visiting family or a range of tourist activities such as sightseeing, winery tours, visiting zoos etc. Therefore those who did the Overland Track as their main purpose but did another activity other than the walk, and those who had a

range of purposes in addition to the Overland Track were further separated as medium and soft ecotourists respectively.

Length of the trip

Although it was not statistically significant ($\rho<0.55$), harder and structured ecotourists reported a longer length of stay than softer ecotourists (18.0 and 18.3 days vs. 15.7 days) (Weaver & Lawton, 2001). In the Phase One interviews, the length of their stay in Tasmania commonly ranged from seven to nine days, ten to 14 days, 17 days to 21 days. Yet, it was considered that the length of trip could be measured by asking the exact dates of their stay in Tasmania, rather than providing statements. This was because new dimensions to add to the Spectrum emerged and the study ensured that the number of statements was limited to 36 statements.

Size of group

Weaver and Lawton (2001) reported that the statement, "All else being equal, I prefer to travel as part of a larger group, as opposed to a small group (i.e., 4 persons or less)" received the highest score from structured ecotourists, followed by softer and harder. Compared to Palacio and McCool (1997) who collected actual data of how many people they travelled with, Weaver and Lawton (2001) measured their preference. In this study, the actual size of group and their evaluation of the size were asked in order to explore the reasons behind the group size. In particular, two questions were asked; 'How many people did you walk with?' 'Do you prefer to walk with a small group or would you like to walk with a bigger group?' Although a small group is identified as four persons or fewer (Weaver & Lawton, 2001), this study defined small groups as one or two, medium groups as four or five and large groups as nine or more people. This is because the smallest number of a group was one person, while the most common size of group was two people. A group of four people were seen to be relatively large, while a common group size of guided walkers was around nine people. The study intended to raise the extreme numbers as lowest and highest to find a clear distinction of the preferred number of walkers in a group.

Physically active/passive

Weaver and Lawton (2001) measured the status of the physically active level based on the statement "I would be willing to go on a long hike in miserable weather if this was my only opportunity to see a unique plant or animal of interest to me". When participants were asked 'Tell me how physically active you were when you were doing the Overland Track', the

respondents described ‘physically active’ in a range of ways; some walkers backtracked to see mountains they couldn’t see on the previous day due to the weather, those who did not take a ferry on the last day, those who did all the side tracks, those who climbed a mountain in the morning to have breakfast on the top, those who skipped two huts, and those who described themselves as a Peak Baggers (those driven by having to climb lots of different mountains). From these wide range of options, ‘the number of side tracks they walked’ was chosen as it clearly differentiates three levels of physically active/passive walkers while other physically active statements did not have comparative statements that could fall into both the medium and soft statements.

Physical challenge/comfort

A statement “I like my ecotourism experiences to be physically challenging” was used in the study of Weaver and Lawton (2001). This study asked ‘How did you find the physical challenge of the Overland Track’ and ‘When you have a holiday in general, do you always seek some degree of physical challenge?’ How they perceived the physical challenge was influenced by a number of different factors; who they walk with (pace and size), the level of facilities (those who complain that the board walk ruins the physical challenge of the walk compared to those who appreciate the board walk as it makes it easier and more comfortable to walk), their previous walking experience and their fitness levels. The responses were often interlinked with the other dimension, physically active/passive statements, as their preference to walk faster/slower, their purpose of walking can also indicate their tendency to seek physical challenge/comfort. The three statements contained the preferred walking pace and purpose of their walk. It was thought that these dimensions seemed relatively similar to physically active/passive dimensions, although the difference lies in the focus of preferred pace and purpose of walking compared to the preferred number of side tracks for the physically active dimension.

Expectation of facilities

“Comfortable accommodation and services are a priority for me” “National parks should provide adequate infrastructure and services to accommodate those who want to go there” “The quality of a destination’s natural environment is more important to me than the quality of the accommodation that I use” were key statements used in the study by Weaver and Lawton (2001) to identify different levels of expectation of facilities and services. When respondents were asked ‘How did you find the facilities on the Overland Track?, Were there any facilities you wished to have?’, three levels of responses were apparent: those who did

not expect many facilities on the track and therefore considered what was provided to be too much, those who expected basic facilities and what was there was good, and those who expected more facilities and therefore felt there were not enough.

Degree of interaction with nature (Deep/superficial)

"I want to learn as much as possible about the natural environment of the sites that I visit while I am there" "I prefer to observe nature in a wild and unrestricted setting" "I like to visit destinations that few others have visited", these statements resulted in a notion that hard ecotourists seek deep interaction with nature while soft ecotourists demand superficial interaction with nature (Weaver & Lawton, 2001). In this study, when the participants were asked 'How do you describe your experience with nature? How much interaction do you think you had? This deep or superficial status were often identified by the level of involvement of the participants with nature. While the superficial interaction with nature was described by walkers who explained their interaction with nature as a visual experience only, deep interaction was identified as full involvement of human interaction with nature, which made them think about their relationship with nature. The medium level of statements included people who occasionally felt the connection with nature.

Emphasis on personal experience

Statements such as "I prefer ecotourism sites in which the natural attractions are interpreted or explained to me" and "I learn more about the natural environment on an escorted tour than through travelling on my (or our) own" played key roles detecting different preferences for interpretation (Weaver & Lawton, 2001). When asking the participants 'What do you think of experiencing the walk with tour guides? Or would you prefer to walk on your own?' the majority of respondents indicated their preference to walk by themselves, although two slightly different ideas sit in this group. While some respondents recognise the use of guides but still prefer to walk on their own for the sake of a greater sense of achievement and freedom, others refuse the role of guides and preferred their own interpretation. The former was placed as medium and the latter was considered as hard. The soft statement consisted of the views of people who preferred to receive information and interpretation from guides. Guided walkers, guides and individual walkers who could not walk with guides often due to the high cost of guided walks provided useful comments used for the soft statement.

Make own travel arrangements

Statements like “I would rather rely on a travel agent or tour operator than make my own travel arrangements” and “I like to be as self-reliant as possible when I travel” helped identify the preference of soft ecotourists to arrange their travel through a travel agent compared to hard ecotourists favouring planning on their own (Weaver & Lawton, 2001). Since 2001 (when the Spectrum was being developed), travel purchase patterns have changed due to the expansion of online booking. However, this dimension was retained in this study to investigate whether ecotourists could be differentiated by the level of independence they preferred when organising their trips. The interviews asked ‘How did you arrange the trip? How did you manage to find all the information? This dimension was particularly difficult to find three levels of responses, as most walkers had to arrange their trip on their own.

Three statements are differentiated from the level of responsibility that respondents want to take from those who enjoy the responsibility (hard), people who ask someone else in the group to lead (medium) and people who completely leave it to someone else (soft).

4.4.2 Emerging Dimensions

The Phase One interviews also asked participants to voice any comments about their experience of the Overland Track, such as their motivations to walk the track, their evaluation of the track, any issues encountered during the walk. Out of these comments derived from the Phase One interviews three dimensions were added as representing social and environmental values. These dimensions were selected for the following two reasons; various responses that can be classified into three levels (ie hard, medium and soft), were not already covered by the ten dimensions in the Spectrum and they conveyed the respondent walkers’ feelings or underlying values towards relevant aspects of the multi-day walk (also see discussion of the development of the instrument on p. 57).

It is important to note that the emerging dimensions were limited to only three due to the limitations of Q method. Fairweather and Swaffield (2001) admit a limitation of Q method is the richness of the data, which makes it difficult to analyse a large data set. Each participant makes a judgement about statements against others and the degree to which how strongly they like/dislike is also comparable between different participants (Barry & Proops, 1999). Given that Barry and Proops (1999) state that a 36 statement based Q sorting is manageable, the number of statements were limited to 36 in this study.

Freedom

When walkers were asked to comment on their preference for walking with guides or individually to test one of the ten dimensions, interpretation, most considered this question as not just a comparison of the preference for receiving information from guides or interpreting by themselves. But it also involved preference for having freedom from instructions. The study identified three types of people; those who sought to be independent, those who sought to achieve a balance of guides and freedom, and those who sought guides to boost confidence.

Access to facilities

There were a small number of participants who mentioned the idea of egalitarianism. In the case of the Overland Track, the idea that the Track could be walked by individual walkers who use public facilities and private guided walkers who stay at private huts with luxuries such as three course meals, hot showers and comfortable bedding. The majority of people commented that they do not mind having an option for guided walks as long as they follow sustainable principles. However some were concerned about inequality. This dimension covers social values, and it was interesting to include as an emerging dimension. This dimension considers whether luxurious experiences should be allowed in the wilderness.

These two dimensions, ‘freedom’ and ‘access to facilities’ form part of social values. Social value can be defined as ‘‘perceived utility acquired from an alternative’s association with one or more specific social groups’’ (Sheth et al., 1991, p. 161). In tourism, social value can be generated from factors including interactions with others on a tour or between passengers and a tour guide, the individual recognition or prestige gained from undertaking the trip (Williams & Soutar, 2009). Hence, these two dimensions are factors creating social values since both stem from the interaction between walkers and a guide, and also individual walkers and guided walkers. When Blamey and Braithwaite (1997) segmented ecotourists based on social values, it was measured by Social Values Inventory which consisted of 17 statements in three aspects: Development and Control, Equality and Harmony and Rights. Under the category of Equality and Harmony, freedom and equal opportunity are listed as ‘being able to live as you choose whilst respecting the freedom of others’ and ‘giving everyone an equal chance in life’ (Blamey & Braithwaite, 1997). These two dimensions are only two in 17 items that make up the Social Values Inventory, however, these two aspects were detected among the respondents in the Phase One interviews and due to their responses ranging from hard to soft, it is believed that these two might add new dimensions into the Spectrum of hard and soft ecotourists.

The impact of facilities on the experience

Some walkers were concerned about 'the impacts of the facilities on the experience'. While one of the ten criteria looks at 'expectation of facilities', these walkers further revealed that the level of facilities on the Overland Track affected their whole experience, and implied their wish for future development. Comments ranged from "having the long board walk, it does seem to me to lessen the whole experience. It made me feel like I am doing a touristy thing rather than a hiking thing*" t*o "I liked the NZ arrangement better. Because the government has put a lot of resources and they put gas cookers in all the huts and they have a ranger in each hut." The comments were comparable from hard to soft levels.

This dimension was considered to provoke the environmental values of walkers, since it asks walkers if the level of facilities can have an impact on the walking/wilderness experience. Environmental values are those values people hold about the relationship between humans and their natural environment (Zografos & Allcroft, 2007). This dimension helps to identify their evaluation of the current facilities on the walking/wilderness experience after completing the track. This leads to reveal their perception of 'multi-day walks in wilderness', and it was thought to be an interesting topic that could differentiate types of walkers of the Overland Track.

4.5 Chapter conclusion

This chapter has presented findings of the preliminary study that were analysed and developed into a final set of 36 statements. The Phase One interviews provided sufficient overview of the experiences of Overland Track walkers who were interviewed. Statements were developed and selected to represent nine dimensions of the Spectrum, while three value based dimensions that are not contained in the Spectrum were also revealed, including 'freedom', 'access to facilities' and 'the impact of the level of facilities on the experience'. The voices of walkers presented in the total of twelve dimensions were categorised into three levels, soft, medium and hard. The final set of 36 statements was presented to walkers on the Overland Track in the Phase Two interviews. Their responses are presented in the following Chapter.

5. Chapter 5 Results (Phase Two Interviews)

5.1 Chapter objectives

The previous chapter identified 36 statements that represent the spectrum of Overland Track walkers based on the original Spectrum of Weaver and Lawton (2001) and adding value dimensions. These statements were sorted in Phase Two interviews, and this chapter presents the results of Phase Two interviews. The purpose of this chapter is to identify and describe the characteristics of factors developed through the Q method. Factors are groups of people who shared the similar patterns of sorting statements, and thus understanding characteristics of each factor helps to understand if the modified spectrum improved the ability to segment Overland Track walkers.

The chapter is structured into three sections. Section 5.2 briefly reviews Phase Two interviews. Since in Q method factors are established quantitatively and followed by qualitative analysis (Fairweather & Rinne, 2012), the following Section 5.3 presents statistical analysis employed to establish factors. Section 5.4 provides the key characteristics of the extracted factors based on sorting of statements. In this section, each factor is named to represent its uniqueness. By describing that characteristics of each factor that resulted from the modified Spectrum, this chapter forms the foundation of the discussion provided in Chapter 6.

5.2 Brief review of Phase Two Interviews

As described in Section 3.5.3, the purpose of Phase Two interviews was to ask participants to sort order the set of 36 statements developed in Phase One interviews. It aimed to segment Overland Track walkers based on how they sort these statements which represent the spectrum of soft and hard ecotourists as well as value dimensions. 56 independent walkers who were walking/had just completed the Overland Track in summer season (2014/2015) were asked to sort 36 statements into a distribution scale. They were also asked to elaborate on their choices and preferences for the statements. 54 people completed interviews.

5.3 Statistical analysis

In Q method, the aim of researchers is to identify the subjective viewpoints represented by factors. Factors are established by statistical analysis, while qualitative analysis follows to understand the factors (Fairweather & Rinne, 2012). The statistical analysis consists of correlation, factor analysis and computation of factor scores (Stergiou & Airey, 2010). The first task of data analysis was to convert Q sort into factors (Watts & Stenner, 2012). The

resulting ranking of the statements (called individual's "Q sort") (Barry & Proops, 1999, Danielson, 2009, Frantzi et al., 2009) of a total of 54 participants were inter-correlated and factor-analysed using PQ Method software that is freely available online (Schmolck, 2014).

5.3.1 Extraction of factors

Factor extraction involved the process of identifying distinct patterns of similarity in the data set (Watts & Stenner, 2012). For this, the software firstly provided an inter-correlation matrix where each of the 54 Q sorts was correlated with one other. Despite the automation, the researcher had to make a series of decisions including which types of factor extraction and which methods of factor rotations to use. Then the researcher ran factor analysis through Principal Component Analysis (PCA), which is a mathematically precise factoring system (McKeown & Thomas, 2013). The results were rotated using Varimax rotation, to extract factors which are significant by the protocols of Q method (Barry & Proops, 1999). Factor rotation is a process of mapping the relative positions or viewpoints of all the Q sorts in a study (Watts & Stenner, 2012). Varimax creates the factor solution that maximises the amount of variance explained on as few factors as possible, which is a way to associate individuals with just one factor (Webler, Danielson & Tuler, 2009). Thus it is widely used as it makes the analysis straightforward and transparent (Webler et al., 2009). This implies that each factor can be represented by an ideal type or simple structure Q sort, which is provided by the program. Importantly it is one of the key characteristics of Q method that factor analysis seeks to cluster respondents rather than variables (Griffiths & Sharpley, 2012). Therefore, factors are clusters of people, who have similar views about a set of variables (Griffiths & Sharpley, 2012).

Deciding on how many factors to extract from the data set is another important task (Watts & Stenner, 2012). Watts and Stenner (2012) believe that there is no correct number of factors and they describe this as the number of slices a cake can be divided into. Similarly, McKeown and Thomas (1988) acknowledge that it is not straightforward to determine whether a factor is significant, and as the process involves a variety of statistical analyses as well as theoretical considerations. In the two sections that follow each of these issues is presented based on sorting of statements. The key criteria of the selection were two significant loaders as a minimum in each factor, and theoretical justification. When participants' sorts correlate significantly with a given factor, it is called a loader (Cairns et al., 2014). Loaders on the same factor share similar sorting patterns, and thus it is expected that they contain distinctive shared views from other factors (Stenner et al., 2003).

5.3.2 The number of factors for statements sorters

Table 6: The number of loaders in each factor solution, in statement sorting.

Factor solution	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Total
2	37	17							54
3	18	15	11						44
4	11	13	11	6					41
5	9	7	9	3	4				32
6	8	5	9	5	1	3			31
7	3	5	8	3	2	2	2		25
8	2	4	7	3	4	1	3	1	25

In this study, outputs with a different number of factor (2 to 8) were compared in order to begin the process of deciding on the best number of factors to select (Table 6). Firstly, factors between two and five were selected for further investigation for the fair number of significant loaders in each factor, that is, over ten or near to ten loaders. This is suggested by Fairweather (2001) who found that six to eight significant loaders in factors provides moderately stable factors, that is, the characteristics of the factor did not change as additional loaders were included. Having at least two significant loaders in each factor was another criterion of the selection. While factors can be formed by a single significant loader with theoretical justification, researchers generally adopt the minimum of two significant loaders for the interest of shared views (Watts & Stenner, 2012). While two, three and four factor solutions contained a larger number of significant loadings in each factor, there was a lack of variance in each factor.

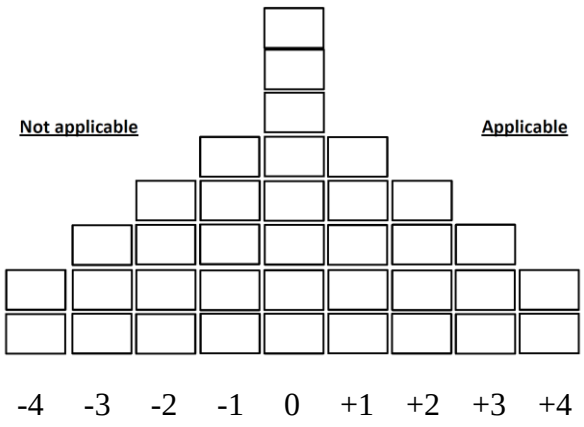
In this study, five factor solution which had three loaders as a minimum was selected as optimum. In particular, a five factor solution provided a more meaningful distinction of social values between factors particularly given that this study aims to add to the model of soft and hard ecotourists, which were absent from the smaller number of factor solutions. In a five factor solution, a loading had to be at least ±0.43 (ABS (2.58/√N) or above at the 0.01 probability level. Only loadings that there were a significant loading on only one factor were used to define the factors. As a result, 32 out of 54 (59%) sorts loaded significantly on one of five factors. The remaining sorts either had no significant loading or had multiple loadings.

The Q sorts of the significant loaders were combined to form a single ideal-typical Q sort for each factor, namely the factor array (Stenner et al., 2003). The factor array is formed based on the process of weighted averaging, which gives more weight in the averaging for high loaders as they demonstrate the factor (Stenner et al., 2003). The factor array of statement sorting is presented in Table 8. The factor array then needs to be interpreted.

5.4 Analysis of factors

The following sections describe each of the five factors and provide demographic details of the participants who loaded significantly on the factor. The ranking associated with each statement identified the priority of characteristics in each segment. Based on that, each factor was given a name. To briefly explain, Factor 1 was named 'Nature Lovers with Comfort' for its strong interest in immersing themselves in nature with certain level of facilities. Factor 2, 'Serious Wilderness Seekers' expect minimal facilities with the idea that wilderness should contain no human influence. Factor 3, 'Busy Challenge Seekers' were determined to walk fast and complete most of the side tracks as the walk was the only reason for their visit to Tasmania. Factor 4 'Social Followers' enjoyed walking in a group and required support from other walkers, while Factor 5, 'Experiential Purists' were those who spoke out about privately guided walkers who enjoy comforts, stating that all walkers should be equal.

Figure 4: 9 point scale and points used in statement sorting



A description of each factor is presented with rankings of the relevant statements. For example, [14: -4] shows that statement 14 was ranked in the -4 position in the factor array of the particular factor (Figure 4). This means that the statement was considered to be one of the least applicable statements. Comments of the participants who significantly loaded in the factor are given to add explanation and interpretation, followed by their ID number and gender in square brackets such as (ID54 male).

Table 7: Factor correlations, % variance explained by each factor and the number of sorts loading on each factor alone at ρ<0.01 in sorting of statements.

Factor correlations						*% variance explained*	*numbers of sorts loading on this factor alone*
	1	2	3	4	5		
1	1.000	0.408	0.614	0.572	0.553	16	9
2		1.000	0.485	0.362	0.588	14	7
3			1.000	0.472	0.548	15	9
4				1.000	0.472	10	3
5					1.000	11	4

Before highlighting the distinctive characteristics of each factor, it is important to acknowledge that factors share elements in common. That is while the factors are presented as distinctive narratives, they are all correlated to a degree. Table 7 indicates the correlation coefficient between the order of statements in each factor. To illustrate, there were four consensus statements among all these factors. Firstly all the groups were neutral about a view that information given by guides is appreciated, although it is too much information [10: 0]. In addition, all the groups shared their negative view about walking with private guides [33: -2]. Walking in a large group such as 9 people was also negatively viewed, while the level of disagreement was slightly stronger among factor 1, 2 and 3 [24: -2], compared to factor 4 and 5 [24:-1]. Finally, strong disagreement for choosing unchallenging walks was common. A slightly stronger degree of disagreement was identified among factor 3 and 5 [14: -3] than that of the others [14: -2].

In addition, it is crucial to mention that 36 statements represent nine dimensions of the Spectrum and three value based dimensions. Since the original Spectrum consists of ten dimensions, there were no statements related to one dimension, ‘the length of stay’. Participants in Phase Two interviews were asked to provide the exact dates of their stay in Tasmania. The average length of stay of each factor is presented in the following section as part of demographic data.

Table 8: Factor array: 36 statements with idealized sorting patterns for each of five segments

No.	Statement	Idealised sort patterns for each factor				
		1	*2*	*3*	*4*	*5*
1	The price of this track is expensive, but on completion of the track it was clear that the fee was good value	0	-1	0	0	2
2	I am pretty happy to pay the track fee. In my opinion, if you are using the track and facilities you should pay for it	3	0	4	2	0
3	I found the price of this track outrageous to be honest. I felt I was being ripped off	-4	0	-4	-3	-2
4	The purpose of this trip was mostly walking but I had another reason to come to Tasmania.	0	1	0	-1	0
5	Walking with 4 or 5 people is good, because a social bond develops naturally.	1	0	0	3	1
6	On a multiday walk I don't expect facilities to be provided so what I found was beyond my needs	-3	3	-1	1	0
7	I like to see how many mountains I can climb and how fast I can do it	-4	0	2	0	-1
8	I enjoyed looking at the visual things and just being out in the fresh air and being outside in the environment	4	3	2	4	3
9	I like to develop my own interpretation rather than someone else's.	2	2	2	0	1
10	I would definitely appreciate input from guides, but sometimes it's too much information. They you don't have enough time to take it in by yourself.	0	0	0	0	0
11	I am not against walking with guides in general, but I wouldn't want a guide with me for 24 hours on the track.	0	1	-1	0	1
12	I don't mind guided walkers having some luxury as long as the private huts are out of my sights. It adds another dynamic.	1	0	1	0	-2
13	I did some side trips, and sometimes I just sat there and had tea.	2	2	0	1	0
14	I don't choose walks that are gonna challenge me. I don't walk harder than I want to.	-2	-2	-3	-2	-3
15	On a multiday walk I do expect some facilities to be provided and what I found was appropriate	2	-1	3	1	1
16	I like being guided. Guides know and understand the country and they can create such a better, richer experience	-1	-1	-3	-1	0
17	I don't want to be responsible for any planning or preparation, which includes having to have the appropriate gear	-3	-3	-2	-4	-1
18	Providing meals and showers is great. You feel special to have such luxury when others cannot	-3	-4	-3	-1	-4
19	It would be great to have more comfortable facilities, but will this experience be still the same? So I would say the level of facilities is good the way it is	1	-1	1	0	2
20	I am totally okay if the national park wants to introduce more comfortable facilities. I don't think the level of facilities changes the whole experience of the walk	1	-2	-1	1	-2
21	From time to time I felt a bit in touch with nature because there was serenity, beauty and variability too	3	-1	1	3	0
22	I like helping to research and make the bookings, but I don't like to take all the decisions when arranging the trip	0	0	0	2	0
23	During the day, I wanted to get the most out of each day, not just walk the three hours hut to hut. So I did most of the side trips including to the top of mountains	-1	1	4	4	4
24	We want a group that is social and interesting. I enjoyed having 9 people in my group	-2	-2	-2	-1	-1
25	The purpose of this trip is just to do the Overland Track and/or other walking in Tasmania	0	-3	2	2	-3

26	I enjoy Tasmania in general. Walking is just one of the things I am doing in this trip to Tasmania	1	4	0	3	4
27	I don't like the idea that someone else is better than you, like some can take a hot shower and others cannot. I think everyone should be equal	-1	0	-2	-2	1
28	I don't like to be guided. When I walk, I like to be independent, and I don't like to be structured	0	2	3	-3	2
29	The walk encourages you to think about our relationship with nature. I felt so connected to the natural environment	3	1	1	1	3
30	On a multiday walk I expect comfortable facilities to enhance my walking experience and these could have been better given the price I paid	-2	-4	-1	-4	-1
31	No way, I don't do side trips they are too much hard work after I have exerted myself. What I've seen is beautiful enough	-1	-3	-4	-2	-4
32	I like walking solo or with one other person. You can set your own time and pace and stop when you want	2	4	3	-3	3
33	I wanted to walk with guides because they look after you. Having people there to support you gives you confidence	-2	-2	-2	-2	-2
34	Having this level of facilities, it does seem to me to lessen the whole experience	-1	2	-1	-1	-1
35	I did all the research, I booked the trip myself online. There is a challenge of doing it by yourself. Part of the fun in camping for me is that 'oh yeah I packed everything correctly'.	0	3	1	0	-3
36	I walk for rest and relaxation, so I just want somewhere with a really nice view. I enjoy having a break and walking at my pace	4	1	0	2	2

5.4.1 Factor 1: Nature Lovers with Comfort

The first and largest group involved nine participants with a relatively equal proportion of males (45%) and females (55%). This group has relatively older participants, with 67% over 55. The majority of this group were Australians both from interstate (45%) and Tasmania (45%), with one international walker (10%) from Germany. 56% of them were married and had mature children, while the rest of them were single. The majority of them (67%) had tertiary education (56% of postgraduates and 11% of undergraduate), while 33% of them finished TAFE or a training certificate. On average, walkers spent 7.6 days walking the Overland Track, which was the longest length compared to the other groups. Most participants (89%) had visited Tasmania as well as the Cradle Mountain Lake St Clair National Park previously (the percentage included four local walkers). In addition, 44% of the participants had walked the Overland Track at least once before, recording the highest percentage of returned walkers among the five factors.

This group shows their strong willingness to engage with nature. They say enjoying the visual aspects of nature [8: +4] helps them experience their deep interaction with nature [29: +3]. While members of this group also agreed that the depth and the amount of interaction with nature were sometimes limited [21: +3], this was explained by the nature of multiday experience which provided a range of experiences each day. A local walker put it:

Not just about looking at Hey there is a nice tree, there is a wallaby. Just looking at something like that in a context of things, and feeling a part of this, I feel so connected (ID 45 male).

Thus, members of this group emphasised their motivation to walk for rest and relaxation [36: +4], and strongly refuted the idea of walking for physical challenge [7: -4]. Similarly, instead of walking to get the most out of each day [31: -1], this group likes to walk only some side trips [13: +2]. A German walker who is an alpine walking guide in Europe commented that

I love to relax, so I go to the edge, but not all the edges. People were like on a race, have you done this? If you don't do it, you are not right….A competition field which is out in this wilderness world was here too. They have to climb all the mountains. That's not true. I am more the opposite (ID 23 female).

Another local participant emphasised the importance of being in nature: "*Come to be, not necessarily to do. That's really important. Being there is more important than getting there. Just to let it be (ID 33 male)*".

This motivational aspect explains why this group seeks facilities to improve the experience [15: +2] and they are satisfied with the current level of facilities [19: +1]. An interstate walker stated that:

I don't need the total luxury to enjoy the Overland Track. There is something about getting cold, boiling water, having packed meals and contented. You learn to appreciate little luxury, like hot chocolate. But I normally pick multiday walks that have basic facilities like this. It's no for me, if there is no facilities (ID 49 female).

This perspective suggests that to experience a relaxing walk and deep interaction with nature, the current level of facilities are appropriate. Their interpretation of the current level of facilities to be appropriate is unique to this group and perhaps explains why this group mildly supports the idea of developing more comfortable facilities [20: +1].

There is a degree. Someone has to decide the line, and that's gonna be more subjective. If they (Parks and Wildlife Services) decide to put something on the track, I don't mind, but only up to a point (ID 45 male).

I do think the level of facilities does change the whole experience, but if it's a minor adjustment, it would be fine I am only thinking a few minor things. Like the first hut can be a bit bigger. We walked into the first night hut during a blizzard. There was

no way that people were sleeping outside camping (ID 52 female).

As such, this viewpoint is supportive of minor changes to the facilities on the track.

Given their expectation of facilities to help their deep interaction with nature, this group is strongly willing to financially support the management of the Park [2: +3]. Members of this group understand the high costs of just having the basic facilities in the wilderness:

> *It costs a lot of money to keep up this track, looking for areas which need more board walk. So why should you pay for it? I mean why not. Completely all right (ID 23 female),*
>
> *It takes a lot of effort and money to maintain something like this. It is the wilderness experience, so you are not going to have luxurious things, but it costs a lot for the maintenance. And the governments don't have enough money. So as long as fees are reasonable, I think it's okay (ID 45 male)*,
>
> *So I've walked the Overland Track 11 times. I only paid the last three trips I made, because back then there was no fee. I appreciate the additional duck boarding that I found. This is relatively expensive, but I have no objection to pay the fee. What else do I spend $200? How does it value compared to $200 that I spent on this trip? (The value of this trip is more than $200) (ID 33 male).*

As noted in their words, the group appreciates the value of the experience over the financial obligation.

In terms of the number of walkers in a group, this group prefers a smaller group [32: +2] to larger one [24: -2], however, a medium size is also accepted [5: +1]. As participants put it,

> *I do a lot of walking with my husband, but we have 6 people in our group. It's good to have friends around us. A long walk like this, good to have friends (ID 32 female).*
>
> *We have 4 people, it's a good size. Sometimes it splits up to 2 and 2. We know each other, and social bond gets developed really well. If you have too many, you don't get close enough to people (ID 45 male*).
>
> *We had 8 people in our group, but 5 people is a good number. Because people can*

walk at their own pace. Whereas with 8, it naturally fits into 4 couples. So it a little becomes separate (*ID 52*).

These comments suggest that a social aspect of the walk is also appreciated by this group.

The mild agreement with walking in a medium group might also explain why this group is not a strong supporter of self-planning. Participants in this group were neutral about being the primary person to plan the trip [35: 0] or supporting the person [22:0]. "*My friend is more experienced walker, so she did all. I do plan my trip and she just follows me. This time, it was her turn (ID 19 female)".* One participant also pointed out that her neutral stance was caused by their experience, which consider self-planning is no longer a big task, but taken for granted.

I did all the research, and most of the preparation. But it was not about yeah, I am the one who organised this, but it was because basically none in my group cared. I shared the responsibility with my sister (ID 49 female).

Developing their own interpretation was more important [9: +2] than having guides interpreting all information; and this group was neutral about the idea of walking individually without guides [28: 0].

Within this group, private guided walkers were seen positively as an opportunity for people with different needs [12: +1]. They seem to admit the difference in financial power and right to enjoy the wilderness with luxurious facilities.

If they want to have luxury, it doesn't bother me. It's their choice. If I wanna have, I would pay for it. That's life. Some people can do things, some people cannot (ID 19 female).

My politics is based on the ability to pay. If they pay for it, I don't mind people having different facilities (ID 44 male).

A local participant also adds his transition to accept this idea over time.

When I first heard about the (private) huts, I objected. I remember coming through, and someone told me that there were five private huts, and I was quite annoyed. I thought people should have private thing in public place. But when I came through and I could only find one, I changed my mind. It's all done sensitively. So if people want to come here and have a hot shower, it's okay (ID 33 male).

Finally members of this group did not provide a clear purpose of their visit [25: 0, 4: 0, 26:1].

This group seeks experience of the Overland Track to be relaxing and social. They enjoy deep interaction with nature and let it be in the natural setting. They appreciate an opportunity to communicate with people on the track. These characteristics seem to be consistent with them being a relatively old group, with 67% over 55 year old.

5.4.2 Factor 2: Serious Wilderness Seekers

This group consists of seven participants who were relatively young; 18-24 (29%), 25-34 (43%), 35-44 (14%), 45-54 (14%). Men dominated this group with 86%. Key demographic features of this group are a high percentage of international walkers and the absence of walkers who had walked the track before. This group includes one local (a migrant from Germany) and an interstate walker respectively, and it had the highest percentage and international walkers (72%). This group also had the highest percentage of single participants with 86%, while 14% of them were married and had school children. The majority of this group had obtained tertiary education at 72%, followed by TAFE/ training certificate and secondary education at 14% respectively. On average, this group walked the Overland Track in 5.6 days. Except the interstate and local participant, all the international walkers had never visited Tasmania before, and it was only the local participant who had visited Cradle Mountain Lake St Clair National Park previously. Furthermore, none of this group had ever walked the track before.

The distinctive character of this group is established by their expectation of the absence of facilities [6: +3, 15: -1, 30:-4], which results in their judgment of the impact of the current level of facilities deteriorating their experience [34: +2, 19: -1, 20: -2]. One group member stated

> *It's true for myself, on the Overland if there were no infrastructure, I would be happier. So definitely it's beyond my need. All the huts, they are not necessary….Because I am looking for a place that is the least touched by humans (ID 54 male).*

A key to understand their lack of expectation of facilities is the nationalities of this group. The majority of this group consists of international walkers (72%) including Finland, Italy, Israel, and the United States. A Finnish man commented that "*I don't need to have good*

facilities because in Finland or Norway, we either have no accommodation or we have very small huts (ID 11 male)". An American man added that

> *In the States, the Avalanche Trail has huts for four or six people, not 35. It's too many people here. It's funny that they say 'Hike in small groups, hike in small groups', and you see 40 people at the huts. What the hell are you talking about? It's two different worlds you know (ID 8 male).*

These comments point out their expectation of facilities have been generated from their wilderness experience in their home country which have minimal facilities. They also imply that for this group wilderness experience is generated through no human invasion, such as minimal encounters with other walkers and the absence of infrastructure. In addition, it is expected that the Overland Track will provide a 'genuine wilderness experience'. Hence it can be argued that this group includes bushwalkers who are highly experienced in the wilderness without facilities. They might be attracted by the wilderness images or reputation of the track, however, their lack of familiarity with the level of facilities on the Overland Track led to their disappointment with what was available. Interestingly, one interstate walker who seems to know the certain levels of facilities on the track also showed his disappointment. He stated that "*20 or 30 years ago, people who did the Overland had mud up to their knees and stuff. Just a little bit, I wanted to feel that (ID 30 male)".* For this group, the wilderness experience is about minimal human development.

Due to their expectation of minimal facilities on the track, this group considered the price of the track relatively expensive [2: 0, 1: -1, 3: 0]. "*I felt the fee was expensive but I understand that it has to be paid somehow (ID 31 male)".* One local walker also raised an idea of local fees, saying

> *There should be a local fee…. Tasmanians don't come to the Overland Track anymore…..It's their own place, it's their home. So I think they have a right to see it. Maybe with the minimum fee….So I think Tasmanians should be encouraged to come up here (ID 54 male).*

'Serious Wilderness Seekers' identified Tasmania as a wilderness destination, resulting in a long length of stay at the average of 21 days. This group has multiple purposes for visiting Tasmania [25: -3, 4: +1, 26: +4]. "*Tasmania is great. We came to do many things. We have three weeks to spend, sightseeing and visiting wineries (ID 10 female)".* The large proportion

of international walkers in this group also contributes to this.

'Serious Wilderness Seekers' interests are concentrated heavily on the visual aspects of the nature [8: +3] rather than feeling a connection with nature. One participant commented:

> *"I love the view, but the part of the walk is to walk, not only the view. Even the view doesn't change in the middle of forests I still enjoy. It's about being outside (ID31 male)".*

While this group showed their mild agreement on deep interaction with nature [29: +1] compared to their temporary interaction with nature [21: -1], saying "*When I was there, I was connected with the environment. Not all the time, but yeah I was (ID54 male)",* this suggests that this group is motivated to just being in the wilderness or viewing the wilderness and lack exploring the spiritual connection between humans and the environment, compared to Factor 1.

This group also values independence. To illustrate, members of this group like walking in a small group [32: +4], self- planning the trip [35: +3], walking without guides [28: +2] and developing their own interpretation [9: +2]. "*I like walking alone or with another person. You can't keep talking to people. You should enjoy the nature (ID 10 female)"*. "*I want to choose the best option (ID 11 male)"*. According to walkers,

> *Part of the challenge is getting organised to make sure your pack is not too heavy, how much gas is consumed to cook this, and so on. I do enjoy that. So the holiday started before (ID 30 male).*
>
> *I want to be independent. I don't want someone to teach me something. Good to have guides but not on this track (ID 26 male).*
>
> *I have walked with guides before. If I had someone in our group who told us things, it would be good to get information. Having a knowledgeable leader is good. But I want to interpret my way (ID 30 male).*

One of the main key differences between Factor 1 and 2 was the motivation for the walk. Compared to the dominant preference for rest and relaxation to physical challenge in Factor 1, this group prefers to have a good balance of both [7: 0, 14: -2, 36: +1]. As the participants

put it:

> *I like to climb mountains but I also want relaxation (ID 26 male),*

> *I do climb many mountains but you do need some sort of fitness level to do it efficiently. If you run to mountains, you'll be running out of food. You spend all days carrying stuff along. You've got to see while you are doing it (ID 8 male)*.

Participants' view of challenge also highlighted the desire for creating individualistic experience:

> *I am not like a competitive person. I don't feel good to do it fast. I feel good if I do with my pace (ID 31 male)*,

> *I do want a challenging walk, but it's not about how fast you can do, how many you can do. It's not about competition (ID54 male)*.

This group is not competitive and they look for their own experience. Similarly, proponents of this group like to walk some side trips, but not many [23: 0, 13: +2, 31: -3]. Again, this is to create their own experience, not to be a competitor: "*I wanted to get the most out of each day, yes but not just kilometers, but just as experience (ID 30 male)".*

The individualistic character is also reflected in their neutral view towards private guided walkers [27: 0, 12: 0, 18: -4]. As described, this group has a strong preference for the least human development for their personal experience in the wilderness. However, members of this group focus on their own experience, and other people are not much of a concern. As a participant commented:

> *Some luxury is fine, because I have met people who won't be able to walk without these facilities. So I think it's fine to have construction to keep them safe (ID 54 male).*

This perspective shares the same view as Factor 1, giving a choice to other people. However, in the process of drawing a conclusion, the same participant also raised an issue of sympathetic view of independent walkers towards guided walkers.

> *I have too many opinions about yes and no, so I put it in as a neutral. I don't think it's about being better. I don't think everybody should be equal either. We are not equal. But one thing, everybody deserves to see a beautiful place anyway. And the other way is true. Independent walkers think they are harder, and private walkers*

are weak. So I don't think it's a problem (ID 54 male).

This group seems to have a hybrid way of thinking. Another walker also commented that

> *My friend did the Overland Track with guides, but not with the Cradle Huts. They camped, but the guides cooked for them. He said he walked Pelion West, which is not on the map. In that sense, I thought guided walk can be good. Not so five star, like Cradle Huts, but you can walk secret tracks. But then, food has to be helicoptered out. Knowing the helicopter is just making the noise to drop off orange juice and a bottle of wine (ID 30 male).*

5.4.3 Factor 3: Busy Challenge Seekers

Nine participants were significantly associated with this factor with a relatively equal proportion of males (55%) and females (45%). The majority of them belong to the relatively young age group of 25-34 (56%), although involving the wide range of age groups including 35-44 (11%), 55-64 (22%) and 65+ (11%). Most were interstate participants (89%) while only one was an international walker (11%) from U.K. There was no local participant in this group. All the members of this group except the international walker had previously visited Tasmania and 78% of them had visited the Cradle Mountain and Lake St Clair National Park. 33% of this group had walked the Overland Track at least once before. Together with factor 2, the average length of the Overland Track was 5.6 days, rated as the shortest among all groups. The majority of participants (67%) were married, while 33 % of them were single. There were only 33% of them who had children and all were mature. There was the highest percentage of participants with tertiary education at 78%, followed by 22% with TAFE/training certificate.

The first dominant theme of this group is their busyness. One of the most highly rated statements by this group was the one showing their strong willingness to use the time efficiently to get the most out of each day during the walk [23: +4]. This busyness seems to be driven by constrained amount of time that this group had for the walk itself as well as for the whole trip. As described, the average length of their walk was shortest among all groups, while this group even had one participant who walked the track in two days. In addition, walking this track or other tracks, was the single most important purpose for this group to visit Tasmania [25: +2, 4: 0, 26: 0].

This busyness brings another key distinctive character of this group, their very strong challenge seeking focus. Members of this group enjoy walking fast and climb many mountains [7: +2]. As a participant stated that "*I like to do how fast I can do, without killing myself (sic) (ID 15 male)*". Additionally, proponents of this view were in strong disagreement with the idea of denying physical challenge as main motivation of the walk [14: -3] as seen in a participant's comment:

> *I choose walks that are gonna challenge me. That's the whole point. I generally want to be physically challenged. I like to be active and I like to push myself (ID 14 male).*

Moreover, given their purpose of whole trip is to walk the Overland Track, unsurprisingly this group is motivated to get the most out of each day.

> *We didn't do as many side trips as we could, given the conditions (the bad weather). I was really upset when we couldn't do Mt Ossa (the highest mountain on the track) (ID 13 female).*

These comments highlight the physically active nature of this group as well as their confidence. Naturally, this view is neutral with the idea of rest and relaxation [36: 0]. As reflected in one of participants: "*I don't wanna sit in a hut and just look. I do want some physical challenge (ID 7 male)",* this motivational dimension is one of the key differences between Factor 1 and Factor 3 as the former place high value on rest and relaxation over challenge.

As a result of their strong focus on challenge and physical activity, it seems that their appreciation of nature is slightly concentrated on visual aspects [8: +2], rather than recognizing a strong relationship with nature [29: +1]. However this does not directly imply that this group had a low level of connection with nature, as some participants reveal a different approach to nature. "*Because I come from an office job, I feel connected just being outside, being in the environment' (ID 3 female)*". "*The relationship with nature is not something I really need to seek. I kind of feel that always anyway. There is no need to feel the stimulation (ID 15 male)".* Both comments imply that in fact they felt connected with nature, although they do not wish to exaggerate their appreciation of nature. Particularly the latter comment suggests that the participant is regularly reminded of the relationship with nature, therefore there is no need to talk about it, whereas other people who do not regularly appreciate nature might have to talk about it. Thus, although a strong connection with nature was ranked less highly compared with other groups, this does not directly mean less

interaction with nature. Some people in this group take the concept for granted.

Being independent, this factor enjoys freedom to be flexible and to make decisions, which are both essential aspects achieving physical challenge. Their motivation to seek independence, such as their preference to walk individually without guides [28:+3] in a small group [32: +3], developing their own interpretation [9: +2], and taking responsibility for planning [35: +1] also implies their confidence to be themselves in the wilderness. Their longing for freedom is visible in these comments.

> *You don't want a guide telling you, so I just want to have my own experience. You stop looking by yourself, if they are telling you, pointing out. I like making my own decision on what to do, when to have lunch (ID 3 female).*

> *I don't like being in a group of people where some are mean, loud, it just doesn't do it for me. A couple of us can do whatever. We can skip huts if we want to. Two people give the flexibility (ID 7 male).*

> *I don't like being told what to do, when to stop. I want freedom. I don't like the idea of someone else being in charge (ID 13 female).*

The following comments further emphasised their confidence:

> *On the Overland Track, I don't think I need a guide. Too easy (ID 16 female).*

> *I like to be self-sufficient, like finding your own way, following the path, knowing that you can do it without guides. Some people who are not confident, they might need that (ID 14 male).*

The confidence of this group perhaps comes from their previous experience in Tasmania. As explained, the majority of this group comprised of interstate participants who had previously visited Tasmania and the Cradle Mountain and Lake St Clair National Park. In fact, the average frequency of previous visit to Tasmania exceeded over 6 times, while that of the National Park was around three times. Further, one third of the group had walked the Overland Track at least once before. The previous visit to Tasmania and previous experience of the walk was expected to form knowledge about climate and geography, and so on and more concrete expectations of what the track offers.

It was clear that their expected level of facility was neither none [6: -1] nor comfortable [30: -1], but at some level of provision [15: +3]. Similarly this group saw the current level of facilities of the Overland Track was appropriate [34: -1, 19: +1, 20: -1].

> *The facilities provided were definitely good. I used most of them. Tables, and you can cook outside, toilets, so there was nothing beyond, I thought (ID 3 female).*

For this, members of this group were strongly willing to financially contribute to the management of the track [2: +4]. This group is aware of the large number of walkers on the track, and their own impacts on the environment, the high cost of managing the track in the remote area, the revenue is limited due to the limited number of walkers allowed to walk per day and therefore they understand the necessity of managing the track.

> *The advantage of charging track fee is to employ rangers, track staff, they can do better management. The whole thing is a much better experience given the number of people trying to use the facilities. So they have to pay the track fee. There is no choice. Then it has to be self-sustainable in some ways. Otherwise, there will be a huge number of people coming in, but there aren't facilities including the track. From 1970's until now, it's been much much improved (ID 7 male).*

> *Clearly you can tell how much it costs to keep this place up. It's not cheap getting stuff up there, like helicoptered in is not cheap. So I understand why it costs (ID 14 male).*

> *Totally agree with the track fee. Really important that they manage the number of walkers too. Crucial when you think about how many people walk per day, it's really good value compared to what they do (ID 3 female).*

Therefore, the facilities were often considered to be essential to minimize the impacts of walkers on the environment. It is commented that "*Compared to three years ago, I can definitely see the improvement. There are more board walks and protecting the environment (ID 40 male)"*. The facilities were also viewed to ease the walking experience, which is viewed positively.

> *Something different about this track compared to other walks, is that there are facilities provided, the fact that there are huts all the way through. One of the nicest thing is you don't need to navigate. It's very easy (ID 7 male).*

This perspective showed their idea of egalitarianism, that is everyone has a choice to enjoy

nature. This group was positive about the idea of private guided walkers on the track [12: +1]. In the words of one walker, "*I don't think we all have to be obligated to have it rough. It's up to individual what they want (ID 13 female)".* They also know the benefits of having guided walkers in order to economically sustain the management of the track.

> *They (the guiding companies) have to provide a large amount of money to the Park so that the Park can spend more money on the (public) infrastructure (ID 7 male).*

> *Honestly, there's very limited people who can do by themselves, and this actually spans it, probably keeps it here longer than it's just people who do bushwalking by themselves (ID 40 male).*

It seems that this group understands that while they have exceptionally high physical fitness levels or previous experience, not everyone does and therefore they have capacity to respect other people who do not have the same.

5.4.4 Factor 4: Social Followers

This group was the smallest group with three participants, with two males and one female. There were one interstate walker and two locals and age ranged from 25-34 to 55-64. This was the only group without any international walkers. All had visited Tasmania previously. While the interstate participant had never visited the National Park before, two locals had visited the place over nine times. There was one local participant who walked the Overland Track once before. Two of them were married with mature children, while one was single. Two respondents had completed tertiary education, and one had TAFE/training certificate. The average of length of walk was relatively long with 6.7 days.

The distinctive character of this factor is their preference for being a follower. This group likes to walk in a medium size of group [5: +3] or larger [24: -1] compared to small group [32: -3]. Despite their strong disagreement with leaving the job of planning to others [17: -4], they were neutral about being the primary person to arrange the trip [35: 0] leaving their preference to be an assistant [22: +2]. A key to explain this tendency was supported by a participant's comment:

> I *don't do solo walk. Decision making thing probably comes in, I don't like taking all the decision on a walking trip because I am not skilled enough. I don't like to be on my own. So I walk with others, generally 4 to 6 (ID 35 male).*

The comment implies that members of this group were either inexperienced walkers who seek support or a kind of person who seeks company.

In addition, while all the other groups appear to prefer to walk independently without guides, proponents of this view strongly disagreed with the idea [28: -3], implying again their preference to walk with someone who has more skills and knowledge. One participant mentioned that

> *It was nice to have rangers and getting 10 minute conversation when they were doing track work. One guy was giving me geology talk, it was so interesting. (ID 4 female).*

The comment revealed their interest in gaining information from rangers or guides who have more knowledge. Further, this group also showed a neutral view or perhaps lack of attention over the choice of processing information individually or through guides [9: 0, 10: 0, 16: -1]. This clearly indicated their lack of a desire for independence. Based on these features this group was characterised as a person who appreciates walking with someone who provides support such as instruction or knowledge, and enjoys the presence of others who make the trip social and interesting. Such characteristics contrast from that of Factor 3 who were confident and sought independence.

Their lack of confidence also explained why they sought rest and relaxation [36: +2] over physical challenge [7: 0]. However, this group had a distinctive combination as they also liked to walk many side trips and being active [23: +4, 13: +1, 31: -2]. The comment, "*We did some side trips, and seeing as much as we can (ID 53 male)"*, might explain that their view that while they wanted to see as much, they were not so determined to achieve all the side tracks. Given their key motivation of rest and relaxation and their interest in a social walk, it was expected that this group only could aim to walk as much as possible. It may be true that this group had to adjust time constantly during the trip, as walking time for the medium group was likely to fluctuate more than those walking in a small group. Their perspective that physical challenge is the part of experience, although balancing the experience with relaxation by having company was also reflected in a participant's comment,

> *What I enjoy about multi-day walking is that sitting around with a cup of tea after the end of the hard day walk and sharing the experience. That's the fun of it. That's why I do it (ID 35 male).*

Members of this group were willing to pay the track fee [2: +2], and strongly disagreed with the view that the fee was too expensive [3: -3]. As commented by a participant: "*I am happy to pay the track fee. It was great to see where our money goes (ID 4 female)",* this group was satisfied with the maintenance of the facilities. Yet, two local participants raised their desire for decreasing the price for locals:

> *Before the trip, I kept complaining that this is very expensive and thought Tasmanian shouldn't have to pay. But after the walk, I think compared to what you are getting, that's more applicable. Tasmanians should get a concession. That's what they do with Port Arthur. You know like 10 or 20% OFF (ID 53 male).*

> *I think you should be paying for hut fee, but not the track fee. But if the facilities are being provided, then I am okay. I am happy to contribute but not the level that we are paying. As a Tasmanian, I should get better access (ID 35 male).*

Rated as the most inapplicable by this group was the high expectation of comfortable facility on the track [30: -4]. In fact participants loaded on this factor indicate a lack of expectation of facilities [6: +1, 15 : +1]: "*I don't expect facilities in Tasmanian walks (ID 4 female)". "I don't want or I don't need any facilities (ID 35 male)".* Given the fact that all the participants had visited Tasmania before, the previous experience might have formed a crucial role in forming the level of expectation of facilities. However, this group also showed positive attitude towards further development of facilities on the track [20: +1]. Their flexibility to adapt to high level of facilities is also detected in a participant's comment:

> *To come in two huts in particular like Pelion and Bert Nichols, they were stunning. We were like "What is this?" I felt like walking in to the most beautiful hotel….it was more than what we expected, but it was nice (ID 4 female).*

Yet, their positive attitude to accept further facilities is detected with condition. As the same participant continues,

> *I like seeing old huts. One of the huts had graffiti and someone wrote 1963. It shows a history of what you are walking through. My parents did it years ago, and it could have been like during that time. Having Bert Nichols Hut everywhere wouldn't be good. It will bring more people through, but I loved seeing how many years it's been there (ID 4 female).*

Another participant added that "*I am talking about mattresses and lights. What they've got is*

pretty acceptable, but these two would be good (ID 53 male)".

Likewise, there was strong acceptance with the idea of private walkers having more comfortable facilities [27: -2, 12: 0, 18: -1]. They only had mild negative reaction with the guided walker who showed off having hot showers and three course meals [18: -1], whereas all the other groups showed strong negative reactions with the score of -3 or -4. A key to understand this is that being a follower of experienced walkers this group may share the empathy with private walkers. As participants comment: "*I don't mind with guided walkers at all. I think some people need them, so there should be facilities provided (ID 53 male)".*

Interestingly, a relatively low level of interaction with nature was detected. While this group strongly agreed that they enjoyed the visual aspect of nature [8: +4], the level of agreement decreased when asking if they felt so connected with nature [29: +1]. It was more common for them to feel sometimes connected with nature [21: +3]. This clearly indicates a superficial approach to nature according to soft and hard ecotourism spectrum. This was explained by participants loaded in this factor:

> *We wanted to do something that is visually appealing. Although the moment you stop looking at your feet, it's the moment you slipped, seriously every time. It's so wet, but yeah, being outside, being away from business (ID 4 female).*
>
> *I like being in outdoor and being in the bush. But I am not a great environmentalist who knows all the birds and plants. I just like to see all of them. I just want to see them, visual things (ID 35 male).*

These comments suggest that superficial interactions with nature were the result of being preoccupied with physical challenge, caused by a lack of experience and a lack of confidence, even if they sought it. It also suggests that this group may not even seek deep interaction with nature but just a visual appeal. Such that, walkers do not need to walk alone, or in a small group, but this group would prefer to have company. This contrasting view is most evident when comparing a comment from a female in Group 2, 'Serious Wilderness Seekers', who commented that "*I like walking alone or with another person. You can't keep talking to people. You should enjoy the nature (ID 10 female)".*

The purpose of trip was unclear as both exploring Tasmania for multiple purposes [26: +3] and for walking as a solo reason [25: +2] scored high.

5.4.5 Factor 5: Experiential Purists

The last group comprises of four participants. Having the equal proportion of gender, there were three international walkers from U.S. Italy and Taiwan and one interstate walker. Along with Factor 3, this group did not have local participants. Being the youngest group, 75% of them were aged at 18-24, while the rest belonged to the 25-34 age group. Members of this group walked the Overland Track on the average of 6 days. All the participants were single. In terms of the level of education, 50% of them had completed tertiary education, whereas the rest of them had TAFE/training certificate or secondary at 25% respectively. There was one international walker who had previous visit to Tasmania and the National Park. However, all the participants in this group walked the Overland Track for the first time.

The distinctive character of this group was established by their very strong distaste for guided walkers who experience luxurious facilities. This group was skeptical about the current inequality between the two kinds of walkers, guided walkers and independent walkers [12: -2]. This group supported the idea that everyone should share the same experience [27: +1]. This viewpoint was distinctive as all the other groups generally regarded walkers with luxurious facilities as an option for elderly or unfit people who otherwise cannot experience the walk, therefore supporting the idea of egalitarianism. This resulted in all the other groups being neutral or not being concerned about having private walkers on the same track. Even 'Serious Wilderness Seekers' revealed individual walkers perspective that they tend to see themselves as strong, while viewing guided walkers as weak, they concluded that everyone should have a right to see and enjoy the wilderness. However, Factor 5 saw 'equality' differently as reflected in a participant's comment;

> *I saw the paid group along the way. We did gossip about them. One of the guides went inside their huts and saw plates, cutlery. We were like it's not even camping. It's not the same experience. So I think everyone should be doing the same. I know they have money so that they can get a better experience without discomfort. I don't like the idea (ID 28 female).*

The strong sense of exclusiveness is a key feature of this group.

A key to understand such social views was evident in their attitude to fully immerse themselves into nature, seen in their seeking of relaxation, demand for spiritual interaction with nature, the use of time, and a sense of independence. Firstly, this group showed their experience of deeply connected with nature [29: +3] and visually appreciating nature [8: +3].

Similarly, they were motivated to walk for rest and relaxation [36: +2] rather than physically being challenged [7: 0]. Participants commented that,

> *I think walking is about relaxation. Walk and look around is not hard (ID 25 male).*

> *It is exhausting, it is a challenge, but the challenge makes you feel good about yourself. When you get to the hut, then you can relax and rest, because you are so tired of the day's hike. It is enjoyable (ID 28 female).*

This combination was similar to Factor 1, in that the visual part of nature helped engage the walkers with a deeper appreciation of nature. Consistent with Factor 1, this group mildly expected some level of facilities [15: +1], and therefore the impact of current level of facilities on experience was judged as appropriate [19: +2]. The mild expectation of the medium level of facilities also led to their perception of the track fee, being expensive although they understood the reasons to financially support the management of the track [1: +2]. All these features correlate with factor 1 to a smaller extent, representing their love with nature.

Further similarities between Factor 1 and Factor 5 continue with their mild agreement with the idea of independence. This was apparent from their preference for walking in a small group [32: +3], developing their own interpretation [9: +1] rather than from guides [16: 0], and walking on their own [28: +2] over with guides [33: -2]. Despite their preference for independence, this group was the only group who strongly refused to be the primary person to plan the trip [35: -3]. One of the key reasons was the age, and this is what differentiates Factor 5 from Factor 1. Being the youngest group in five groups, it was likely that they were accompanied by a strong leader, as seen a participant' comment.

> *Dad did the most of planning, but I think it's important to have all your gear, and I wasn't like okay you do it all, I was helping out, but he was the leader (ID 28 female).*

This group sought immersion in the experience. Their efficient use of time despite the longtime-frame of their trip showed dedication to the walking experience. The average length of their stay in Tasmania was the longest among all the other groups, at 32 days, with multiple purposes of visiting Tasmania [26: +4]. In spite of the long timeframe, this group walked the track in 6 days on average, which was not necessarily long. In addition, they were willing to see as much as they can on the walking track [23:+4]. As seen in participants'

comments : "*I want to see all I can (ID 25 man)"*. "*I wanted to climb Cradle Mountain, but the weather was awful. So we couldn't, but I wanted to climb (ID 37 female)",* this group was eager to maximise the use of time on the track to see everything they can as if they will never return. Despite their long period of time in Tasmania, they did not extend their stay on the track.

For such interests to fully immerse into nature and the experience, they strongly rejected the idea about that the experience should be easy and comfortable. The idea of choosing a walk that does not seek challenge [14: -3], not attempting many side trips [31: -4], and enjoying comfortable facilities [18: -4] were all strongly rejected. As a participant put it in, "*You don't wanna challenge yourself? Then don't come here, no point (ID 9 male)"*. The same participant continues that "*Go to a resort if you want that (luxurious facilities) (ID 9 male)".* For this, members of this group did not support any further development of facilities on the track [20: -2]. Participants commented that

> *I won't be okay if they change the facilities. It will change the camping and hiking experience, and change the field of the whole walk. So I think it's a bad idea to improve the facilities (ID 28 Female)*
>
> *It means here will be a holiday park, comfortable. I think it will destroy the nature. I do think it will change the whole experience too (ID 36 Female).*

This group is named as 'Experiential Purists'. This group includes nature lovers who appreciate deep interaction with nature through enjoying the visual attraction of nature. They understand the necessity to charge the track fee and to maintain the basic level of facilities. Their belief that experience will be different if there is any further development of comfortable facilities, also adds to an implication that this group seems to love their own experience as individual walkers. Their love with nature, their perspective of minimising needs in wilderness settings, has led to a perspective that everyone should experience the Overland Track just like how they experienced. This group is preoccupied with their perspectives, and tends to regard guided walkers' experiences as unfair. It seems that guided walkers are viewed as cheating, while people who demand a slightly higher level of facilities are considered to be lazy. Their attitude to immerse into the wilderness experience was mostly corresponding to characteristics of Factor 1. Being the youngest group who did not

take primary responsibility of the travel arrangements, the age could be one of the key reasons for their purist views.

5.5 Chapter conclusion

In conclusion, this chapter has presented the study's findings of Phase Two interviews regarding segments of Overland Track walkers based on the Spectrum with value dimensions. The previous chapter identified 36 statements that represent the spectrum of Overland Track walkers based on the original Spectrum of Weaver and Lawton (2001) and emerging value dimensions. Phase Two interviews asked independent walkers who were walking/had just completed the Overland Track to sort these statements and elaborate on their choices and preferences for the statements. Since the purpose of Q method is to identify the subjective viewpoints represented by factors, which mean groups of people who share sorting patterns of statements, factors were extracted by statistical analysis and followed by qualitative analysis. The characteristics of five factors were presented with a name that describes its uniqueness, and the research findings illustrate a variety of travel characteristics, social and environmental values of the Overland Track walkers. Next, Chapter 6 will analyse the findings in reference to extant literature, and will discuss the implications of this research for ecotourism study, practice and future research.

6. Chapter 6 Discussion and Conclusion

6.1 Chapter objectives

The present study was designed to examine the ability of Weaver and Lawton's Ecotourist Spectrum to segment ecotourists on the Overland Track multi-day walk once values had been incorporated into the Spectrum. The purpose of this chapter is to examine the study's findings in light of previous literature discussed in Chapter 2. This chapter firstly states the research aims of the study in Section 6.2. Section 6.3 looks at how the inclusion of values into the Spectrum generated five segments of Overland Track walkers. The five segments are further examined in Section 6.4 to understand what the emergence of these segments means for the utility of the Spectrum and its future in ecotourism research. Section 6.5 provides a conclusion of this study, by presenting the spectrum of five segments of Overland Track walkers. Section 6.6 discusses contribution of this study to theory and practice. Finally, limitations of the study and directions for future research are identified in Section 6.5 and Section 6.6.

6.2 Background

6.2.1 The aim of research

The aim of the research is reflected in the research question:

To what extent does the inclusion of values into Weaver and Lawton's Ecotourist Spectrum affect its ability to segment ecotourists in the context of a multi-day walk?

Weaver and Lawton's Spectrum (2001) identified ten dimensions that distinguished ecotourist characteristics from soft to hard, and was one of the first studies to recognise that the ecotourism market was heterogeneous. An examination of the literature however found that this behaviour based model produced only a basic distinction between ecotourists. Studies by Blamey and Braithwaite (1997) and Zografos and Allcroft (2007)' both suggested that social and environmental values could be added to behavioural characteristics of the Spectrum to produce a more nuanced view of the distinctive characteristics of ecotourists.

This study added value dimensions to the Spectrum to attempt to generate a greater understanding of the spectrum of ecotourists. The dimensions were derived from interviews that formed Phase One of the project. Sixty interviews were conducted with respondents that

had recently completed the Overland Track. The aim was to identify both social and environmental values that could be incorporated into the Spectrum. Two social dimensions did emerge that caused debate amongst the interviewees. Firstly, 'freedom' and secondly 'access to facilities'. One environmental dimension, 'the impact of the facility on the experience' also emerged. Incorporating these two social values and one environmental values, produced a modified spectrum of 12 dimensions that was tested by a second round of interviewees with independent walkers on the Overland Track in Phase Two of the data collection.

The Overland Track is both a nationally and internationally renowned multiday wilderness walk which attracts a large number and range of ecotourists. To identify people who share similar travel characteristics and values, Q method was employed. Walkers interviewed in Phase Two were also asked to sort a range of statements that were devised from the responses of those interviewed in Phase One. It is important to acknowledge that both the modification to 'the Spectrum' and the statement wording was developed from feedback from independent Overland Track walkers during Phase One of this study.

6.3 Five groups of the Overland Track walkers

6.3.1 The market of Overland Track walkers is heterogeneous

First of all, when the Overland Track walkers were segmented based on the modified spectrum, five groups of walkers who shared similar travel characteristics and attitudes emerged. Each group had distinctive features, and it was apparent that the Overland Track walkers were not a homogenous group of ecotourists. This finding confirms previous studies who suggested that the ecotourism market is heterogeneous (Blamey & Braithwaite, 1997, Palacio & McCool, 1997, Weaver & Lawton, 2001, Zografos & Allcroft, 2007). While previous studies of ecotourism market segmentation were limited to general ecotourism settings, such as anyone at the airport in a well-known ecotourism destination (Palacio & McCool, 1997) and the general public in Australia (Blamey & Braithwaite, 1997), or a soft ecotourism setting such as participants of a nature based day tour (Bricker & Kerstetter, 2002) and eco-lodge guests (Weaver & Lawton, 2001), the participants of this study were those involved in a hard ecotourism activity, the multi-day Overland Track walk. This finding that even Overland Track walkers can be segmented using the modified Spectrum was a striking aspect of this study. Moreover it confirms the findings of previous research that identified the market for multi-day walks as heterogeneous (Cook, 2008, Curtis & Zanon, 2010).

6.3.2 All segments were 'structured ecotourists' and contained mix of both hard and soft ecotourist characteristics

Each segment found in this study contained a complex mix of soft and hard ecotourist features as shown in Table 9. This is in line with 'structured ecotourists', who were the third type of ecotourists found by Weaver and Lawton (2001) along with softer and harder ecotourists. 'Structured ecotourists' contained a mix of soft and hard ecotourist characteristics in their study. While this study has been unable to demonstrate 'hard ecotourists' or 'soft ecotourists' existed that satisfied all hard or soft dimensions suggested by Weaver and Lawton (2001), all the groups contained 'structured ecotourists'. A possible explanation for these results might be the limit of applicability of the modified spectrum to segment Overland Track walkers.

While all the groups contained a mix of soft and hard ecotourist features, based on the number of soft or hard dimensions of ecotourists raised by each group, some groups had a larger number of hard ecotourists characteristics than others, suggesting a possible ranking of five groups from harder to softer. However, the question arises to the weight of each dimension to determine hard and soft ecotourists. Can each dimension be treated equally, or should particular dimensions be weighted with more importance than others? For instance, 'Serious Wilderness Seekers' who exhibited seven hard ecotourist dimensions did not clearly demonstrate their strong environmental commitment, while 'Social Followers' who displayed the largest number of soft ecotourist dimensions displayed strong environmental commitment. Can behaviour based dimensions such as size of group and length of stay better describe who are hard or soft ecotourists than value based dimensions? These questions remain unanswered since Weaver and Lawton (2001) did not attempt to explain how each dimension should be weighted. What this study found was that overall Weaver and Lawton's (2001) Spectrum does not directly apply to Overland Track walkers. Rather the segments revealed a much more complex array of soft and hard ecotourist features. The augmented spectrum with values were able to identify the complex features of the walkers, however, it needs to be further augmented to better describe the five groups who emerged in this study into soft and hard distinction.

Table 9: Classifying characteristics of five segments into soft, medium, and hard per dimension (based on sorting of 36 statements)

	Nature Lovers with Comfort			Serious Wilderness Seekers			Busy Challenge Seekers			Social Followers			Experiential Purists		
	Hard	Medium	Soft	Hard	Medium	Soft	Hard	Medium	Soft	Hard	Medium	Soft	Hard	Medium	Soft
Envir. Commitment	3	0	-4	0	-1	0	4	0	-4	2	0	-3	0	2	-2
Purpose of visit	0	0	1	-3	1	4	2	0	0	2	-1	3	-3	0	4
Size of group	2	1	-2	4	0	-2	3	0	-2	-3	3	-1	3	1	-1
Physical active/passive	-1	2	-1	1	2	-3	4	0	-4	4	1	-2	4	0	-4
Physical challenge/comfort	-4	-2	4	0	-2	1	2	-3	0	0	-2	2	-1	-3	2
Expectation of facilities	-3	2	-2	3	-1	-4	-1	3	-1	1	1	-4	0	1	-1
Interaction with nature	3	3	4	1	-1	3	1	1	2	1	3	4	3	0	3
Interpretation	2	0	-1	2	0	-1	2	0	-3	0	0	-1	1	0	0
Travel arrangements	0	0	-3	3	0	-3	1	0	-2	0	2	-4	-3	0	-1
Freedom	0	0	-2	2	1	-2	3	-1	-2	-3	0	-2	2	1	-2
Access to facilities	-1	1	-3	0	0	-4	-2	1	-3	-2	0	-1	1	-2	-4
Impact of facilities	-1	1	1	2	-1	-2	-1	1	-1	-1	0	1	-1	2	-2

Hard Medium Soft

6.4 What does the emergence of five segments mean?

6.4.1 Social values allowed detection of distinctive groups of independent Overland Track walkers

Access to facilities

Prior studies have noted the importance of social values as potential dimensions to segment types of ecotourists (Blamey & Braithwaite, 1997), although such dimensions were absent in the original Weaver and Lawton spectrum. This study identified that independent walkers frequently discussed the issue of allowing guided walkers to have luxurious facilities on the track. By extracting three types of responses to this topic, this study aimed to test if their view of 'access to facilities' could segment groups of people. This dimension was designed to represent 'giving everyone an equal chance in life' (Table 10) in 'equality and harmony' according to the social values inventory used in Blamey and Braithwaite (1997)'s study (See Section 4.4).

Table 10: Three levels of the statement on 'access to facilities'

Access to facilities		
Hard	Medium	Soft
I don't like the idea that someone else is better than you, like some can take a hot shower and others cannot. I think everyone should be equal.	I don't mind guided walkers having some luxury as long as the private huts are out of my sight. It adds another dynamic.	Providing meals and showers is great. You feel special to have such luxury when others cannot.

The study found that most groups shared the view that luxury facilities can be found on the track as an option for elderly or unfit people who otherwise cannot experience the walk. On the other hand, one group, 'Experiential Purists' had a distinctive view that all the walkers should experience the same level of facilities. 'Experiential Purists' believed that all Overland Track walkers should experience the walk the way an independent walker would experience it. Luxury facilities were seen to be 'unfair' or 'cheating'. Nested in their love for nature, they believed that minimising human needs in wilderness settings is necessary to maintain the quality of the wilderness experience.

The finding of the existence of 'Experiential Purists' is one of the most significant outcomes of the inclusion of values to the Spectrum. Since Q study uses factor analysis, no single dimension can singlehandedly act as a determinant of segmenting the walkers. Similarly, one

group cannot be characterised by a single feature. However, their distinctive reaction to 'access to facilities' was the key characteristic of 'Experiential Purists' and this group could not have been identified from the original Spectrum.

Yet this social dimension does not simply help segment the walkers as being in either a soft or hard category. While most groups agreed with luxurious facilities for 'giving everyone an equal chance in life' (Blamey & Braithwaite, 1997), 'Experiential Purists' seem to support limiting the opportunity to those who are physically incapable. Therefore 'Experiential Purists' seem to hold lower regard for equality than other groups. However, as discussed in the previous section, 'Experiential Purists' contain a number of other dimensions that are associated with hard ecotourists. This again indicates the complicated characteristics of Overland Track walkers.

One thing to note is that 'Experiential Purists' were the youngest group, who were accompanied by a leader, such as a parent. As they get older, they might start to build their sympathy towards older people. It could be also said that they might become 'Serious Wilderness Seekers' in the future, as they get to form their ideas of a wilderness experience and seek individual experiences for themselves, instead of looking at how others such as guided walkers are treated.

Freedom

An additional dimension adopted in this study to test walkers' social values, was whether walkers regard the importance of walking with guides for safety. This dimension emerged from the Phase One interviews when the role of guides was considered to not only provide interpretation, but to also play a role in ensuring the safety of walkers both of which compromised walkers' freedom. The following three responses were detected (Table 11)

Table 11: Three levels of the statement in 'freedom'

Freedom		
Hard	Medium	Soft
I don't like to be guided. When I walk, I like to be independent, and I don't like to be structured.	I am not against walking with guides in general. They can be useful when you are older, for example.	I wanted to walk with guides because I needed instruction, and guides can give you confidence.

Overall, this dimension did not provide a clear distinction between the walkers since all the groups agreed with the hard statement, that they do not seek guides for instruction or as a

source of confidence. 'Social Followers' did not always prefer walking independently due to their preference to walk with fellows. This has synergies with Weaver and Lawton's (2001) original characteristics given their preference to walk in a larger group and preference to play a supporting role to the primary travel arranger. This dimension 'seeking of instruction/safety or freedom' adds to explanation of the characteristics of 'Social Followers', which were already evident from the original dimensions of the Spectrum.

6.4.2 Environmental values detected a distinctive group who sees a wilderness experience differently from other groups

Previous study also has suggested potential use of environmental values as a potential dimension to segment types of ecotourists (Zografos & Allcroft, 2007). While the original Spectrum did not include it, this study explored whether the level of facility can have an impact on the walking/wilderness experience. By extracting three types of responses to this issue as shown in Table 12, this study aimed to test if their view of the impact of facilities on walking experience could segment groups of people.

The impact of facilities on the experience		
Hard	Medium	Soft
Having this level of facilities, it does seem to me to lessen the whole experience.	It would be great to have more comfortable facilities, but will this experience still be the same? So I would say the level of facilities is good the way it is.	I am totally okay if the national park wants to introduce more comfortable facilities. I don't think the level of facilities changes the whole experience of the walk.

Table 12: three levels of the statement in 'the impact of facilities on the experience'

This environmental dimension in addition to other existing dimension of the Spectrum allowed the identification of a unique segment of people who hold different environmental values. 'Serious Wilderness Seekers' were distinguished from other segments by their expectation of their preference for no facilities on the track. They also judged that the current level of facilities on the track exceeded their needs, and they lacked willingness to pay the track fee. Overall, in terms of environmental values, the difference between 'Serious Wilderness Seekers' and other groups stemmed from their perception of what a wilderness experience should be. This group expected wilderness to mean a place that has little modification by humans, and consequently were unwilling to pay the track fee. The following

section looks at each of three dimensions of the Spectrum that demonstrated distinguishing characteristics of 'Serious Wilderness Seekers'.

The impact of facilities on the experience

This study clearly demonstrated that people who accept the current the level of facilities are those who expect few facilities, supporting the conceptualisation of hard ecotourists by (Weaver & Lawton, 2001). However, this study also found that people who expected 'few facilities' were considered to be in the medium position in the spectrum due to the presence of walkers who expect 'no facility'. In this study, "*On a multiday walk I don't expect facilities to be provided so what I found was beyond my needs*" (Statement 6), was associated as a hard view of Overland Track walkers. This view was a key feature of 'Serious Wilderness Seekers', whose entire experience was let down by what they regarded as an overdevelopment of facilities on the track. These results differ from the original Spectrum by Weaver and Lawton (2001) which neglected to include a group of people who seek 'no facilities'. An implication of this is the possibility that the hard end of the Spectrum needs to include an element that refers to a preference for 'no facilities.'

The preference for 'no facilities' appears to stem from participants' notion of 'wilderness.' 'Serious Wilderness Seekers' emphasised that 'wilderness' should be "*the least touched by humans (ID 54 male)*". This view is consistent with a previous study that found that seeing no sign of previous human interference is linked to the notion that wilderness is defined as pristine and untouched (Brookes, 2001). Paradoxically, it is also argued that the value of wilderness will only be appreciated when people experience nature, which will in turn facilitate people's understanding of the symbolic process that reconnects us with the deepest part of ourselves (Schroeder, 2007). The ideal value of wilderness and experiential value often conflicts in decision making regarding wilderness management, although both values are interconnected and mutually reinforcing (Schroeder, 2007). Cole (2005) states that some people do not want to recognise the conflict, as they lack empathy for others' values. This helps to explain that 'Serious Wilderness Seekers' probably exclude themselves as contributing towards environmental impacts as they believe only they are in the wilderness, and their low numbers will not damage the environment. This has synergies with Wray et al. (2010) who found local multi-day walkers criticise major negative environmental impacts

attributed to international multi-day walkers, when in reality they also cause environmental damage.

In contrast, despite their ideal view of what wilderness should be, groups who supported few track facilities seem to reconcile their experience of too many facilities with the need for development to reduce impacts on the environment, and ensure safety and hygiene. In the words of one participant: "*Having a certain level of comfort allows you to not get injured or ill due to a bad weather (ID 45 Nature Lover with Comfort)".* In short, basic facilities were necessary to reduce the impacts of walkers on the environment or to improve the quality of experience and these views were expressed by 'Nature Lovers with Comfort'. It can be seen that they were more aware of the impacts they have on the track, compared to others who expected 'no facilities'. It might be more appropriate to say that they were able to see themselves as a walker who caused environmental impacts. This highlights that people who seek 'few facilities' accept and appreciate experiential values of wilderness, whereas those who seek 'no facilities' seek ideal values of wilderness. This questions who 'hard' ecotourists are, those who seek 'few facilities' or 'no facilities'. The discussion cannot be answered in this study since both experiential and ideal values of wilderness are interconnected and mutually reinforcing (Schroeder, 2007).

Environmental commitment (willingness to pay a track fee)

In this study, the environmental commitment was measured by a behavioural intention based dimension, namely the willingness to pay the Overland Track fee. This study demonstrated that 'Busy Challenge Seekers', 'Nature Lovers with Comfort' and 'Social Followers' who understood the high cost of managing the track in remote areas were willing to pay the track fee. This is supported by Williams, Vogt and Vittersø (1999) who found that those who understand the purposes of the fee such as environmental protection are more likely to be willing to pay. As mentioned previously, these groups also expected and appreciated the current levels of facilities on the track, for protecting the environment. 'Busy Challenge Seekers' who had the strongest willingness to pay the track fee clearly understood that the track needs facilities to minimise the environmental damage caused by the large number of walkers, it is expensive to build and maintain facilities in remote areas, and the revenue is limited due to restrictions on the number of walkers allowed per day. In contrast, 'Serious Wilderness Seekers' who expected no facilities did not appreciate the necessity of the high price for (what they considered were) excessive facilities. For the group who saw that the level of facilities exceeded their needs, the cost of introducing facilities to protect the

environment probably was not appreciated. For this, the study finds that the willingness to pay the track fee helped to distinguish groups of people who connect the fee with conservation from those who do not.

While 'Experiential Purists' seemed to understand the purpose of the track fee, given their expectation and acceptance of the current level of facilities, they found the cost of the track fee was slightly high. 'Experiential Purists' were the youngest group who had rarely visited Tasmania before and were mostly international visitors. Thus it could be said that the first time visitors from overseas were not aware of the high cost of maintenance fees, and young walkers had limited budgets despite their understanding of paying the fees. These results differ from previous studies which found that people were more willing to pay the entrance fee to a natural site if they are young (Bowker, Cordell & Johnson, 1999, Reynisdottir et al., 2008), travelled a long distance to the site (Schroeder & Louviere, 1999) and rarely visited the site, since repeat visitors probably grow a sense of ownership to the site that is not compatible with fees (Reynisdottir et al., 2008). This again explains the complexity of the characteristics of Overland Track walkers. Yet it is important to note that the Overland Track walkers are asked to pay double entry fees including the national park entry fee and the Overland Track fees. It could then be said that although young, international people who rarely visit the site were still willing to pay the fee in accordance with previous studies, the current cost of fees are already considered to be high. While the demand to visit a place with remote, outstanding scenery or recreational opportunities is considered to be stable even if the price changes (Clawson & Knetsch, 1966). Findings of this study imply that the fee may be reaching the threshold level for some visitors. This supports the point that strong willingness to pay the track fee was associated with their understanding of the need for conservation while a lack of willingness is associated with a lack of appreciation of the need for facilities or limited budgets. Yet it is important to note that due to the small sample size of Q study, any characteristics that show correlation with a particular segmentation group should be treated as an assumption (Ockwell, 2008).

6.4.3 Synergies and challenges to the original Spectrum

Since the study contained a complex mix of soft and hard dimensions identified by Weaver and Lawton (2001), the following section provides the summary of key relationships found in the independent Overland Track walkers. No single group emerged from this study that could be classified as 'hard ecotourists' or 'soft ecotourists as outlined by Weaver and Lawton (2001). However other correlations were observed. Consequently by identifying synergies

with and challenges to the original spectrum, this section aims to highlight unique characteristics of independent Overland Track walkers.

6.4.3.1 Synergies with Weaver and Lawton (2001)

The following three dimensions received similar responses from the majority of groups, suggesting common features of Overland Track walkers. Consequently this thesis contends that these dimensions do *not* help distinguish differences among the five groups of walkers. These three dimensions are;

- Size of group
- Travel arrangements
- Interpretation

Size of group and travel arrangement

The majority of groups in this study demonstrated hard ecotourist characteristics through two dimensions, the size of group and their travel arrangements. Weaver and Lawton (2001) identified that hard ecotourists travel in small groups and plan their trip on their own, while soft ecotourists tend to travel in a large group and prefer to arrange their travel through a travel agent. Palacio and McCool (1997) also supported the idea that hard ecotourists travel in small groups. The findings of this study were in line with previous studies. Indeed, the findings illustrated hard ecotourist characteristics by two dimensions. Participants preferred small or medium groups, while their preference for travel arrangement ranged from being the primary person to organise the trip to being the second person to support the main organiser. All the groups disagreed with the idea of walking in a large group such as 9 people (statement 24), while the majority of groups strongly agreed with walking in a small group for flexibility, freedom, less trouble, and walking at a similar pace. Similarly the majority of groups demonstrated the use of travel agents was one of their least applicable characteristics. One group, 'Social Followers' were an exception as they demonstrated their preference for a medium size of group. Booth et al. (2011) note that social relationships between family and friends, as well as overseas walkers ability to mix with locals are appreciated as aspects of the social significance of long distance walks. In addition, 'Social Followers' indicated their medium position to be the second person who supports the primary organiser. It is expected that a 'Social Follower' is a typical member of a bushwalking club who relies on a leader. They are nervous to walk in a small group as they think they lack in confidence and experience.

Interpretation

The findings of this study support the idea that hard ecotourists prefer self-interpretation. The majority of groups, including 'Busy Challenge Seekers', 'Nature Lovers with Comfort' and 'Serious Wilderness Seekers' indicated their preference for self-interpretation. 'Experiential Purists' also demonstrated a moderate preference in the same regard. 'Social Followers' had a neutral position on this. Soft ecotourists who prefer guides to help interpret nature (Weaver & Lawton, 2001) were absent, implying a strong common feature of independent Overland Track walkers was to reject the need for interpretation provision.

6.4.3.2 Challenges to Weaver and Lawton (2001)

The research found an inverse relationship between some dimensions of the original Spectrum. For example, two particular dimensions frequently demonstrated that a group who had a hard ecotourist characteristic in one dimension was strongly correlated with that of soft ecotourist features in another dimension. These inverse relations were found between:

- the length of trip and purpose of the trip;
- the level of seeking physical challenge or comfort and the level of interaction with nature; and
- the level of being physically active or passive and the level of interaction with nature

These relationships will now be explored in detail.

Length of trip and purpose of trip

Weaver and Lawton (2001) argued that hard ecotourists stay longer (18 days) compared to soft ecotourists (15 days), and hard ecotourists have a sole-purpose for their trip compared to soft ecotourists who have a multi-purpose. The findings of this study do not concur. It was found that walkers who stayed longer in Tasmania had multiple reasons for their trip, while those who stayed for a shorter period had a sole purpose, that being to walk the Overland Track or do bushwalking in general. For instance, the groups who had the longer stays including 'Experiential Purists' (32 days) followed by 'Serious Wilderness Seekers' (21.3 days), intended to pursue multi-purposes when exploring Tasmania. This is described in their words, "Tasmania is great. We came to do many things. We have three weeks to spend, sightseeing and visiting wineries" (ID 10 female from Serious Wilderness Seeker). These results also differ from those of Palacio and McCool (1997) who found that hard ecotourist segments had multiple purposes and shorter stays compared to the softer segments. Therefore findings of the current study do not support previous research of ecotourism market

segmentation. Thus this implies that previous thoughts on ecotourism segmentation were too rudimentary to be useful.

Examining the data in more depth revealed a possible explanation that can be related to their previous visits and/or their place of origin. Both 'Serious Wilderness Seekers' and 'Experiential Purists' were mostly first time visitors to Tasmania, while 'Nature Lovers with Comfort', 'Busy Challenge Seekers' and 'Social Followers' were repeat visitors. First time visitors visit iconic attractions, while repeat visitors tend to concentrate their activities in fewer places (McKercher, Shoval, Ng & Birenboim, 2012). It is also reported that long haul groups engage with multiple destinations while short haul segments focus on one destination (Ho & McKercher, 2014). This particularly applies to 'Serious Wilderness Seekers' and 'Experiential Purists' since the majority of both groups consisted of international visitors, compared to other groups comprising of interstate and local visitors. Thus it appears that international walkers were attracted to the Overland Track, but also took the opportunity to see Tasmania in a range of ways. In contrast, repeat visitors such as 'Nature Lovers with Comfort' devoted their limited trip duration to the Overland Track or other walks, while 'Social Followers' who had the shortest stay did not have a clear trip purpose.

The level of seeking physical challenge/comfort and the level of interaction with nature

Firstly this study demonstrated that the dimension of seeking 'physical challenge or comfort' helps identify different segments of walkers who participate in physically challenging walks as discussed by Weaver and Lawton (2001). This study found that even among those who participate in physically challenging activities there are people who seek mostly physical challenge and those who seek physical comfort. Thus it challenges the assumption of Weaver and Lawton (2001) that only hard ecotourists undertake physically challenging forms of ecotourism.

For example, the study found that all the five groups agreed that they choose 'physically challenging' walks in general (Statement 14). However, 'Nature Lovers with Comfort', 'Social Followers' and 'Experiential Purists', also sought physical comfort, identified as a characteristic of soft ecotourists by Weaver and Lawton (2001). Questioning if these comfort seekers are soft ecotourists, an interesting relationship between the level of interaction with nature emerged.

Consequently this study does not support the idea that those who seek physical comfort must be considered to be soft ecotourists. This is because the research revealed that the participants desire to seek physical challenge was negatively affected by the level of their interaction with nature. While hard ecotourists have been identified as seeking physical challenge and deep interaction with nature (Weaver & Lawton, 2001), the results of this study suggests a negative relationship between the two dimensions. It was found that 'Busy Challenge Seekers' who sought physical challenge were more likely to only visually interact with nature, whereas 'Natural Lovers with Comfort' who preferred physical comfort had a deep interaction with nature. These results contradict Weaver and Lawton (2001), as the findings demonstrated that the characteristics of soft ecotourists (physical comfort) were strongly linked to that of hard ecotourists (deep interaction with nature). The findings suggest that 'Nature Lovers with Comfort' strongly sought to heighten their relationship with nature by reducing physical challenge due to their exploration of rest and relaxation. Not a definitive, but supportive statement of this perspective was also given by a participant in the Phase One interviews.

> *There are people who do it for achievement, and they are not interested in nature. They are doing it to see how many mountains they can climb, how fast they can do it. Like a tick box, I've done the Overland Track. I am hard core kind of feeling.*

It can thus be suggested that in case of the Overland Track walkers, those that seek physical challenge prioritise physical activity over a deeper interaction with nature. This does not mean that those who seek physical challenge do not have any interactions with nature. The study suggests they are less likely to have deep interactions with nature, due to their strong interests in the physical activity itself so only have time look at nature.

It should be noted that these findings cannot be extrapolated to all walkers. 'Social Followers' had low levels of interaction with nature despite seeking physical comfort, readily equating to Weaver and Lawton (2001)'s spectrum. A possible explanation of this inconsistency is due to the feature of 'Social followers' who like to socialise with members of their group and follow the leader in their group. The constant presence of other walkers around them implies a reduced opportunity for them to face nature alone.

The level of being physically active or passive and the level of interaction with nature

Hard ecotourists have been previously defined as physically active (Weaver & Lawton, 2001), and other empirical studies support the idea that harder ecotourism market segments prefer outdoor activities (Palacio & McCool, 1997) compared to softer segments who seek 'relaxing' experiences (Zografos & Allcroft, 2007). Eagles (1992) further suggested that ecotourists seek a completely different adventure from daily life, while mainstream tourists focus on relaxing, having a break and doing something similar to daily life. Yet, since all the Overland Track walkers in the study seek outdoor activities that provide them with a completely different experience to their daily lives including the softer walkers this dimension has been contradicted.

In this study, the term, 'physically active/passive' was interpreted harshly by the walkers interviewed compared to the original work by Weaver and Lawton (2001). Weaver and Lawton (2001)'s original study measured the physically active condition by a willingness to do a long hike in bad weather to see fauna and flora. However, the study found that whereas the main Overland Track stretches around 62.5km, some participants walked over 100km by selecting all the optional side tracks. For this, the level of 'physically active' was measured by how actively walkers chose to complete side tracks.

The findings of this study challenge Weaver and Lawton (2001)'s original model which associated physically active ecotourists with a deep interaction with nature. First, this study found that physically active groups including 'Busy Challenge Seekers' and 'Social Followers' appeared to miss or not seek opportunities for a deep interaction with nature. These groups placed high importance on the walk and were satisfied with the visual attraction of nature, as commented by a 'Social Follower', "*I just like to see all of them (birds and plants). I just want to see them, visual things (ID 35 Social Follower)*". Second, this study also found that moderately physically active groups such as 'Nature Lovers with Comfort' and 'Serious Wilderness Seekers' seek to relax and enjoy the interaction with nature. These groups seem to balance the level of their physical activity with their appreciation for interaction with nature, as commented by a walker;

> *I love to relax, so I go to the edge, but not all the edges. People were like on a race, have you done this? If you don't do it, you are not right…. They have to climb all the*

mountains. That's not true, I am more the opposite (ID 23 Nature Lover with Comfort).

These findings imply the inverse relationship between the two dimensions.

This finding partially supports Zografos and Allcroft's (2007) study which found less active walkers seek 'relaxing' experiences, though in their context such a combination is seen as characteristics of soft ecotourists. Yet, the blend of being less active, seeking a 'relaxation' experience is uniquely linked to deep interaction with nature in case of the Overland Track walkers. This again complicates the judgement of who is the harder ecotourist. From their value based study of ecotourism market segmentation, Blamey and Braithwaite (1997) seem to have provided a clue. Their study found while the spiritual side of nature and the importance of the intrinsic value of nature were commonly identified by all segments, harder segments agreed more strongly. But in contrast, this study has shown softer segments had a deeper interaction with nature thus dispelling the association of hard ecotourists and a deep connection to nature.

A note of caution is due here since the statement used to identify superficial interactions with nature (statement 8) received high scores from all the groups. Surprisingly the majority of groups agreed that they experienced the visual attraction of nature more strongly than they had a deep interaction with nature. Yet, the overall level of interaction with nature was judged by the combination of the visual and spiritual interaction with nature. Those who were considered to have a 'deep interaction with nature' were identified by appreciating both values.

Seemingly, the proposed two inverse relationships support a correlation of two dimensions in the original model, which are the level of being physically active and the level of seeking physical challenge. Examples are 'Nature Lovers with Comfort' who were moderately physically active and sought physical comfort, and 'Busy Challenge Seekers' who were active and sought physical challenge. However, these results were not consistent, since physically active groups such as 'Social Followers' and 'Experiential Purists' also sought physical comfort. In addition, this study does not support the idea that walkers who are 'physically active' and seek 'physical challenge' are hard ecotourists, as they tend to have a lack of interaction with nature, which seems to be one of the important motivations for ecotourists to take part in learning experiences.

The following section will now provide a summary of this study. A summary of the findings in relation to the research question is provided. The significance of the findings, limitations of the study and recommendations for future work are also discussed.

6.5 The spectrum of five segments of Overland Track walkers

This study aimed to answer the following research question;

To what extent does the inclusion of values into Weaver and Lawton's Ecotourist Spectrum affect its ability to segment ecotourists in the context of a multi-day walk?

The findings show that the inclusion of social and environmental values into the Spectrum assisted the segmentation of Overland Track walkers into five groups. The spectrum of the five segments of Overland Track walkers found in this study in relation to ten dimensions of the Spectrum and three value related dimensions is summarised in the Table 13.

Table 13: The spectrum of the five segments of Overland Track walkers

The Spectrum of the five segments of Overland Track walkers		
1. *Strong environmental commitment*	----------	*Weak environmental commitment*
2. *Long stay*	----------	*Short stay*
3. *Multiple purposes*	----------	*Sole purpose*
4. *Small size*	----------	*Medium size*
5. *Physically passive*	----------	*Physically active*
6. *Physical comfort*	----------	*Physical challenge*
7. *Expectation of no facilities*	----------	*Expectation of few facilities*
8. *Deep interaction with nature*	----------	*Visual interaction only*
9. *Emphasis on self- interpretation*		
10. *Primary person to plan the trip*	----------	*Second person to plan the trip*
11. *Facilities diminish the experience*	----------	*Facilities improve the experience*
12. *Common experience for walkers*	----------	*Differential experience for walkers*
13. *Independent preference*	----------	*Group preference*

Two groups were characterised for their unique social and environmental values respectively. A new social dimension, 'access to facilities' enabled the identification of a unique cluster of

people named ‘Experiential Purists’ who believe that allowing guided walkers to experience luxurious facilities is unfair or cheating, and therefore everyone should use the same basic facilities. This sentiment is represented in Dimension 12 of Table 13 as ‘common experience for walkers’. This was unique since most other groups shared the view that luxury facilities can be found on the track as an option for elderly or unfit people who otherwise cannot experience the walk (represented by ‘differential experience for walkers’ in Table 13). In addition, a new environmental dimension, ‘the impact of facilities on the experience’ as well as the existing dimension; ‘willingness to pay the track fee’ (environmental commitment) and ‘their expectation of facilities on the track’, enabled the identification of ‘Serious Wilderness Seekers’ who hold distinctive environmental values. They wished no facilities to be provided on the track (Dimension 7) since wilderness should be unaltered by humans. They held a lack of willingness to pay the track fee (Dimension 1), and judged the current level of facilities to be overdevelopment (Dimension 11). This idea was viewed as an ‘ideal’ form of wilderness by other groups in this study who accepted the need for basic facilities to minimise environmental impacts caused by walkers.

Another social dimension added to the Spectrum was ‘freedom and safety’, although this did not provide a clear distinction between the groups. All the groups agreed that they do not seek guides for instruction or as a source of confidence. However, it provided a clue to understand the characteristics of ‘Social Followers’ who did not necessarily appreciate walking independently (Dimension 13). This group also expressed a unique view due to their preference to walk in medium sized groups (Dimension 4) due to their lack of confidence and experience as well as their preference for building social relationships with family and/or friends. ‘Social Followers’ also tend to be the person who supports the primary organiser (Dimension 10). On the other hand, most walkers travelled in a small group for flexibility and freedom and they were the primary person to arrange the trip.

The study also found inverse relationships between two dimensions of the original Spectrum. The study found that walkers who stayed longer in Tasmania had multiple reasons for their trip, while those who stayed for a shorter period such as ‘Busy Challenge Seekers’ had a sole purpose, which was to walk the Overland Track (Dimensions 2 & 3). According to Weaver and Lawton (2001), hard ecotourists were those who stayed longer and had a solo purpose, whereas soft ecotourists stayed for a shorter time and had multiple purposes. While it is

considered that hard ecotourists are physically active, seek physical challenge and have a deep interaction with nature, the study found that groups who seek physical challenge prioritise physical activity over a deep interaction with nature. It was found that those who preferred physical comfort had a deeper interaction with nature (Dimensions 6 & 8). Similarly physically active groups appeared to miss or not seek opportunities for deep interactions with nature (Dimensions 5 & 8). The preference for self-interpretation (rather than interpretation provided by guides) was consistent among all the groups as they all valued their independence. Hence Dimension 9 is positioned in the middle of Table 13.

Although the modified spectrum allowed the detection of these unique five groups of walkers, this research could not rank the five groups in the soft and hard spectrum. This is why Table 13 does not identify which end of the spectrum is 'soft' or 'hard'. Overall, this study was unable to demonstrate 'hard ecotourists' or 'soft ecotourists' who satisfied all hard or soft dimensions suggested by Weaver and Lawton (2001). All the groups contained at least one element defined by Weaver and Lawton (2001) as structured ecotourists, who contained a mix of soft and hard ecotourist characteristics. This complication raises a question of the weight of each dimension. Should each dimension be treated equally or should particular dimensions be weighted with more importance than others? Interestingly this study fails to answer this question, since the original Spectrum of soft and hard ecotourism did not rank the dimensions. What this study found was that the segments it uncovered using the modified Spectrum display a far more complex array of soft and hard ecotourist perspectives. This study has shown that in order to rank Overland Track walkers from soft to hard, the modified spectrum should also rank dimensions to distinguish softer or harder characteristics.

6.6 Implications for theory and practice

The aim of this research was to explore segmentation of ecotourists participating in a hard ecotourism activity such as a multi-day walk. The research intended to use the Ecotourism Spectrum developed in 2001 by Weaver and Lawton as it appeared to be the most accepted tool available to explore the heterogeneous ecotourism market (Collins-Kreiner & Israeli, 2010). On closer inspection of the literature criticism of the Spectrum was revealed therefore the study decided to modify the Spectrum by adding values as implied by both Blamey and Braithwaite (1997), Zografos and Allcroft (2007) before testing the modified spectrum on the Overland Track, Tasmania. The findings of the research confirm that the market of ecotourists participating in a hard ecotourism activity such as multi-day walks is

heterogeneous. Five distinct segments of walkers were identified but each group contained a mix of hard and soft ecotourism characteristics as identified by Weaver and Lawton's (2001) Spectrum. This research therefore suggests that the incorporation of social and environmental values into the original Spectrum of soft and hard ecotourists was effective at identifying a range of segments that reveal a more complex array of characteristics than the behaviour-based Spectrum could uncover. The inclusion of values derived from the experiences of walkers interviewed on the Overland Track (Phase One), allowed the Spectrum to be more meaningful and allowed a more nuanced interpretation of ecotourist segments.

In addition to discovering that the behaviour-based Spectrum can reveal more complex segments when it incorporates values, the study makes some practical suggestions that could be of benefit to managers of the Overland Track. The research contributes to providing recommendations to Parks and Wildlife Services and in this particular case to Parks and Wildlife, Tasmania. Firstly the current level of facilities available on the Overland Track is appreciated by most independent walkers. Many of the interviewees appreciated the need for facilities in order to protect the track. Support for the current level of provision and the detection of a segment who felt the quality of their experience had been reduced by the excessive level of facilities therefore suggests that additional major upgrades of facilities should be avoided. Secondly, the research uncovered a small group of walkers who disagreed with the idea of guided walkers enjoying more luxurious facilities on the Track. Although most groups understood the importance of opening the opportunity to experience the walk to a wider range of people, particularly people who are less physically capable, many respondents felt the walk should only offer the basic facilities open to public independent walkers. Thus the management authority should continue to regulate and minimise the development of facilities and services from private enterprises on the Track. Thirdly the price of the track fee was considered to be acceptable since most walkers understand the high cost of managing the track. However, the price may be reaching the threshold level for a group of people who were characterised as young walkers from overseas.

6.7 Limitations

This study acknowledges that the focus of the study was narrowed to people who had experienced hard ecotourism activities. Classifying people who had already chosen this style of ecotourism activity meant that the original Spectrum of soft and hard ecotourists was used as a guide that was adapted to explore characteristics among walkers. As discussed in Section 4.3, in the process of developing statements from the Phase One interviews, three levels of statements, soft, medium and hard were extracted based on the interpretation of the experiences of Overland Trackers. In other words, what was regarded as a 'soft' or 'hard' statement in this study was drawn from the words of the participants interviewed in Phase One. Consequently groups in Phase Two interviews who displayed 'soft' dimensions may not be 'soft' as described by Weaver and Lawton (2001) and it should be treated as 'softer' rather than soft.

As outlined in Section 3.8, the study also acknowledges the absence of off-peak walkers who were considered to contain a large number of local walkers and guided walkers. While both groups were included in the Phase One interviews to capture a broad range of walker types, they were not approachable during the Phase Two interviews. This was due to nature of Q method which involves a long interview time, and to the restricted time scale and budget open to the project. Guided walkers for example operate on a tight time scale and spend little time waiting for transport where they could be interviewed. In addition the researcher had to restrict her movements to public huts and campsites and did not have access to the private sites. However, 95% of Overland Track walkers walk during the peak season. It is during this time that the broadest range of local, interstate and international walkers participate, and the bulk of track fees are collected. Therefore this study concentrated on targeting this time period and the findings of this study only apply to the independent Overland Track walkers in the peak season. If this study had included non-peak periods different segments of walkers may have emerged. It is recommended that future research in the area could be conducted at peak and non-peak times to explore whether different segments are revealed.

As described in Section 4.4.2, value dimensions added in this study were limited to only three due to the limitation of Q method which makes it difficult to analyse a large data set. Given a 36 statement based Q sorting is manageable (Barry & Proops, 1999), the number of statements were limited in this study. In addition, these value dimensions were developed purely based on the Phase One interviews. Use of established measurements such as Social

Value Inventory (Braithwaite & Law, 1985) and New Environmental Paradigm (Dunlap et al., 2000) could have improved the validity of the study. However, these measurements consist of 17 and 15 statements respectively, and it was difficult to use with the ten dimensions of the Spectrum in Q method. Quantitative studies using these measurements could be conducted to understand the potential to improve the Spectrum by adding value dimensions.

6.8 Recommendations for future research

This research has thrown up a key question in need of further investigation that is the weight of each dimension in the Spectrum. Should each dimension be treated equally or should particular dimensions be weighted with more importance than others? Since the original model of soft and hard ecotourism Spectrum did not rank the dimensions, further research is needed to prioritise the dimensions to define the importance of elements to reveal who are harder or softer ecotourists.

This study identified two value based topics that are worth investigating using Q method with statement sorting; namely, allowing for the mixture of public independent walkers with private guided walkers who experience more luxurious facilities on the same multi-day walk in the wilderness and secondly what a wilderness experience should be. In the current study only a small group of people expressed their dissatisfaction but these two values lie at the heart of track development and management and deserve to be explored in more detail if managers are to understand the needs of their walkers.

In addition, as already mentioned the inclusion of walkers on guided tours and off-peak walkers could add a wider variety of travel characteristics of Overland Track walkers and explore social and environmental disputes hidden in these groups. As Q method proved useful in identifying segments of ecotourists on the Overland Track it may be useful to apply the modified spectrum using Q method to a range of ecotourism activities to verify or expand on the findings identified here.

6.9 Chapter Conclusion

In conclusion, this research has explored the influence of adding values to the behaviour-based Ecotourism Spectrum (Weaver & Lawton, 2001) to segment Overland Track walkers. It concluded that while the modified spectrum allows the segmentation of Overland Track walkers, even with the modification it does not help to identify purely 'hard' or 'soft' ecotourists. The research provides deeper insights into the complex features of multi-day walkers. It also contributes to ecotourism theory by highlighting the need for prioritising dimensions in order to draw softer or harder distinctions among 'structured ecotourists'. Finally, the research has identified avenues for potential research for future researchers in this field.

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Appendix A: Interview Schedule Phase One Interviews

1) When did you complete the Overland Track?
2) Why did you choose that time of year to do/walk the Track?
3) What motivated you to do the Overland Track?
4) How would you describe your experience on Overland Track?
5) What aspects of Overland Track did you like the most?
6) What aspects of Overland Track did you like the least?
7) What was the purpose of the trip? Was the Overland Track the only purpose of the trip?
8) How many days did you take to do the Overland Track?
9) How long was the whole trip in Tasmania?
10) How did you find the length of the trip?
11) Who did you walk with?

□ By myself □ Friends □ Family □ Partner □ Other (Please specify ……)

12) How many people were there in your group including you?
13) Do you prefer to walk with small group or would you like to walk with a bigger group?
14) Tell me how physically active you were when you were doing the Overland Track.
15) How did you find the physical challenge of the Overland Track?
16) When you have a holiday in general, do you always seek some degree of physical challenge?
17) How did you find the facilities on the Overland Track?
18) Were there any facilities you wished to have?
19) How do you describe your experience with nature? How much interaction do you think you had?
20) What do you think experiencing the walk with tour guides? Or would you prefer to walk on your own?
21) How did you arrange the trip? How did you manage to find all the information?
22) Have you ever done a multi-day bush walk before? If so what other tracks have you done?
23) Have you done the Overland Track before?
24) Have you visited Tasmania before?

25) What was the last level of formal education you completed?

a)Primary School b)Secondary School c)Trade/Technical Certificate

d)TAFE Certificate/Diploma e) University: Bachelor Degree

f) University: Honours, Master, PhD

26) What is your post code in Australia or country of origin?

27) Gender □ Female □ Male

28) Age □ 15-24 □ 25-34 □ 35-44 □ 45- 54 □ 55-64 □ 65+

Appendix B: Interview schedule of Phase Two Interviews

1) How do you describe your experience of the Overland Track (so far)?
2) What motivated you to walk the Overland Track?
3) What is so special about multi-day walks?
4) How many days did you/are you planning to take to walk the track?
5) Were there any facilities you wished to have on the track?
6) Now that you have done this, I would like you to sort some statements. The statements describe motivation, travel characteristics and values of people who have done the Overland Track. I would like you to think about which of these statements are applicable to your experience of the Overland Track.

Firstly I would like you to sort these statements into THREE piles – one which is applicable to your experience of the Overland Track; the second which is not applicable to your experience of the Overland Track; and the third which is neither applicable nor not applicable to your experience of the Overland Track.

From your pile of statements which you think applicable, I would like you to pick two statements which you think the most applicable to your experience of the Overland Track.

- Now pick the three statements which you think the most applicable
- Now pick the four statements which you think the most applicable
- Now pick the five statements which you think the most applicable

From your pile of statements which you think not applicable, I would like you to pick two statements which you think the least applicable to your experience of the Overland Track.

- Now pick the three statements which you think the least applicable
- Now pick the four statements which you think the least applicable
- Now pick the five statements which you think the least applicable

From your pile of statements which you think neither applicable nor not applicable, I would like you to sort the remaining statements in the scale (provided in the following page).

*** Interviewer: Ensure you place a line in the recording sheet where the applicable and not applicable ends

7) Now that you have sorted your statements, I would like you explain why you sorted each statement in this way.

Data Recording Sheet Only

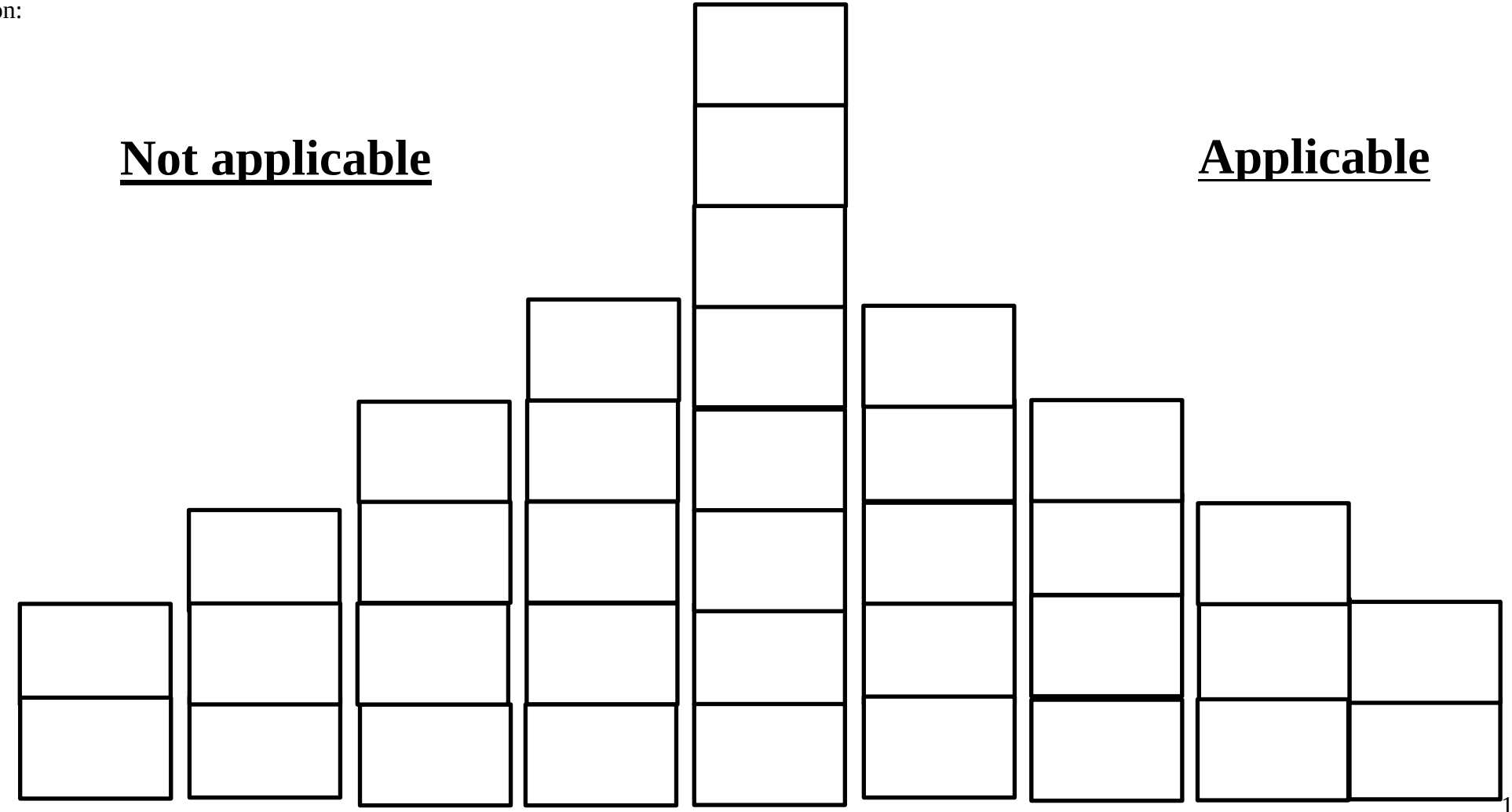
Subject No.

Date:

Location:

Not applicable

Applicable



8) Gender □ Female □ Male

9) Age □ 15-24 □ 25-34 □ 35-44 □ 45- 54 □ 55-64 □ 65+

10) What is your post code in Australia or country of origin?

Post code ( )

Country of origin ( )

11) What was the last level of formal education you completed?

□ Primary School □ Secondary School

□ Trade/Technical Certificate □ TAFE Certificate/Diploma

□ University: Bachelor Degree/Diploma □ University: Postgraduate

12) Have you walked the Overland Track before?

13) Have you visited this National Park before?

14) Have you visited Tasmania before?

15) How long is your whole trip in Tasmania?

Appendix C: Interview Sheet

Exploring the limits of ecotourists: Multi-day walkers in the Cradle Mountain Lake St Clair National Park, Tasmania

Chief Investigator: Dr. Alison Dunn

Co-Investigator: Dr. Anne Hardy

Student Investigator: Mizuki Yamasaki

Invitation

You are invited to participate in a research study exploring the limits of ecotourists: Multi-day walkers in the Cradle Mountain Lake St Clair National Park, Tasmania. The study is being conducted by Mizuki Yamasaki, as a PhD project, supervised by Alison Dunn and Anne Hardy of the Tasmanian School of Business and Economics at the University of Tasmania.

1. 'What is the purpose of this study?'

The purpose is to explore the limits of hard ecotourism development in the Overland Track, Tasmania. The research aims to reveal the extent to which the Overland Track can be developed before it becomes unattractive to the walkers. The research hopes to provide recommendations to Parks and Wildlife Service (PWS) to plan their future development of multiday walks. The study also aims to contribute to the model of hard and soft ecotourism spectrum by reassessing the guiding criteria of hard ecotourists through a study of multi-day walkers.

2. 'Why have I been invited to participate in this study?'

Your involvement is crucial, as the study hopes to capture walker experiences of the Overland Track. Your thoughts about the need for facilities and services, your travel motivations and your values will all provide insights into the future development of multiday walks.

3. 'What does this study involve?'

This research will comprise an interview which asks you to select statements into groups. You will be asked to rank a range of statements regarding travel preferences such as length of trip, size of groups, motivations for travel and values. You will be asked to explain why you like or dislike each statement. If you give your consent, the interview will take approximately 30 minutes.

It is important that you understand that your involvement of this study is voluntary. While we would be pleased to have you participate, we respect your right to decline. If you decide to discontinue participation at any time, you may do so without providing an

explanation. All information will be treated in a confidential manner. As the survey and the interview will be anonymous, there will not be a way to contact the participants after the study has been concluded. All of the research will be kept in

a locked cabinet or password protected computer in the office of Alison Dunn and will be securely destroyed five years after publication of the data.

4. Are there any possible benefits from participation in this study?

There is a lack of research on characteristics of multi-day walkers, particularly to what extent they demand services and facilities. This study hopes to reveal needs of the walkers and provide advice on future development of the Overland Track.

5. Are there any possible risks from participation in this study?

There are no specific risks anticipated with participation in this study. You will not be asked to reveal any sensitive personal information. However if you feel that you would rather not answer a question, please feel free to either state that the information is too important to divulge, or that it is of such a nature to be treated with the utmost care by the researcher. You can also withdraw from the survey at any time.

6. What if I have questions about this research?

If you would like to discuss any aspect of this study please feel free to contact me Mizuki.Yamasaki@utas.edu.au. I would be happy to discuss any aspect of the research with you. You are welcome to contact us at any time to discuss any issue relating to the research.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote HREC project number: H0014289.

Thank you for taking the time to consider this study.

Completion of the interview constitutes consent to participate. If you wish to take part in it, please sign the attached consent form.

This information sheet is for you to keep.

Thank you for your participation. Enjoy the rest of walk.

Appendix D: Consent Form

Title of Project: Exploring the limits of ecotourists: Multi-day walkers in the Cradle Mountain Lake St Clair National Park, Tasmania.

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1. I have read and understood the 'Information Sheet' for this project.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves an interview which includes a selection of statements on my values and motivation for travel (With your permission the interview will be recorded).
4. I understand that there are no specific risks associated with my participation in the questionnaire but I realise I can decline to answer a question or withdraw from the interview at any time.
5. I understand that all research data will be securely stored on the University of Tasmania premises for at least five years, and will then be destroyed.
6. Any questions that I have asked have been answered to my satisfaction.
7. I agree that research data gathered from me for the study may be published provided that I cannot be identified as a participant.
8. I understand that the researchers will maintain my identity confidential and that any information I supply to the researcher(s) will be used only for the purposes of the research.
9. I agree to participate in this investigation and understand that I may withdraw at any time without any effect, and if I so wish, may request that any data I have supplied to date be withdrawn from the research.

Name of Participant:

Signature: Date:

Statement by Investigator

☐ I have explained the project & the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation

If the Investigator has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

☐ The participant has received the Information Sheet where my details have been provided so participants have the opportunity to contact me prior to consenting to participate in this project.

Name of investigator _____

Signature of investigator _____ Date _____